



14421 County Rd. 10 • Ft. Lupton, Colorado 80621 • (303) 857-9999 • FAX (303) 857-0577 • E-MAIL Permitco 1@aol.com

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December 13, 2006

Division of Oil, Gas & Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, UT 84114-5801  
Attn: Minerals

Re: Gasco Production Company  
Wilkin Ridge Federal #41-28-10-17  
793' FNL and 858' FEL  
NE NE Section 28, T10S - R17E  
Duchesne County, Utah

Gentlemen:

Enclosed please find one copy of the Application for Permit to Drill, along with one copy of the Onshore Order No. 1 which was filed with the BLM in Vernal, Utah.

If you should need additional information, please don't hesitate to contact me. Approved copies of the A.P.D. should be sent to Permitco Inc. at the address shown above.

Sincerely,

PERMITCO INC.

*Tabatha Parker*

Tabatha Parker  
Consultant for  
Gasco Production Company

RECEIVED

DEC 26 2006

DIV. OF OIL, GAS & MINING

Enc.

cc: Gasco Production Company - Englewood, CO  
Shawn Elworthy - Roosevelt, UT

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐  
(highlight changes)

APPLICATION FOR PERMIT TO DRILL		5. MINERAL LEASE NO.: <b>UTU-75085</b>	6. SURFACE: <b>BLM</b>
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>		7. IF INDIAN, ALLOTTEE OR TRIBE NAME: <b>N/A</b>	
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>		8. UNIT or CA AGREEMENT NAME: <b>Wilkin Ridge</b>	
2. NAME OF OPERATOR: <b>Gasco Production Company</b>		9. WELL NAME and NUMBER: <b>Wilkin Ridge Federal #41-28-10-17</b>	
3. ADDRESS OF OPERATOR: <b>8 Inverness Drive East, Suite 100, Englewood, CO 80112</b>		10. FIELD AND POOL, OR WILDCAT: <del>Wilkin Ridge</del> <i>undesignated</i>	
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: <b>585079' X 4419148' 39.920047</b> AT PROPOSED PRODUCING ZONE: <b>793' FNL and 858' FEL NE NE - 110.004479</b>		11. QTR/QTR, SECTION, TOWNSHIP, RANGE MERIDIAN: <b>Sec. 28, T10S-R17E</b>	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: <b>Approximately 23.65 miles south of Myton, UT.</b>		12. COUNTY: <b>Duchesne</b>	
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) <b>793'</b>		13. STATE: <b>UTAH</b>	
16. NUMBER OF ACRES IN LEASE: <b>1960</b>		17. NUMBER OF ACRES ASSIGNED TO THIS WELL: <b>40 Acres; NE NE</b>	
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET): <b>None</b>		20. BOND DESCRIPTION: <b>Bond No. UT-1233</b>	
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): <b>6007' GL</b>		23. ESTIMATED DURATION: <b>35 Days</b>	

24. PROPOSED CASING AND CEMENTING PROGRAM			
SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT
17-1/2"	13-3/8", H-40, 48#	200'	200 sx Premium Type 5, 15.6 ppg, 1.18 yield
12-1/4"	8-5/8", J-55, 32#	3,605'	607 sx Hi-Lift, 11 ppg, 3.91 yield + 185 sx 10-2 RFC, 14.2 ppg, 1.63 yield
7-7/8"	4-1/2", P-110, 13.5#	12,905'	523 sx Hi-Lift, 11.5 ppg, 3.05 yield & 1309 sx 50/50 Poz, 14.1 ppg, 1.28 yield

25. ATTACHMENTS	
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:	
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PROGRAM
<input checked="" type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

AGENT: <b>PermitCo Inc.</b>		AGENT'S PHONE NO.: <b>303-857-9999</b>	
NAME (PLEASE PRINT) <b>Tabatha Parker</b>		TITLE <b>Agent for Gasco Production Company</b>	
SIGNATURE <i>Tabatha Parker</i>		DATE <b>December 13, 2006</b>	

(This space for State use only)

API NUMBER ASSIGNED: **43-013-33473**

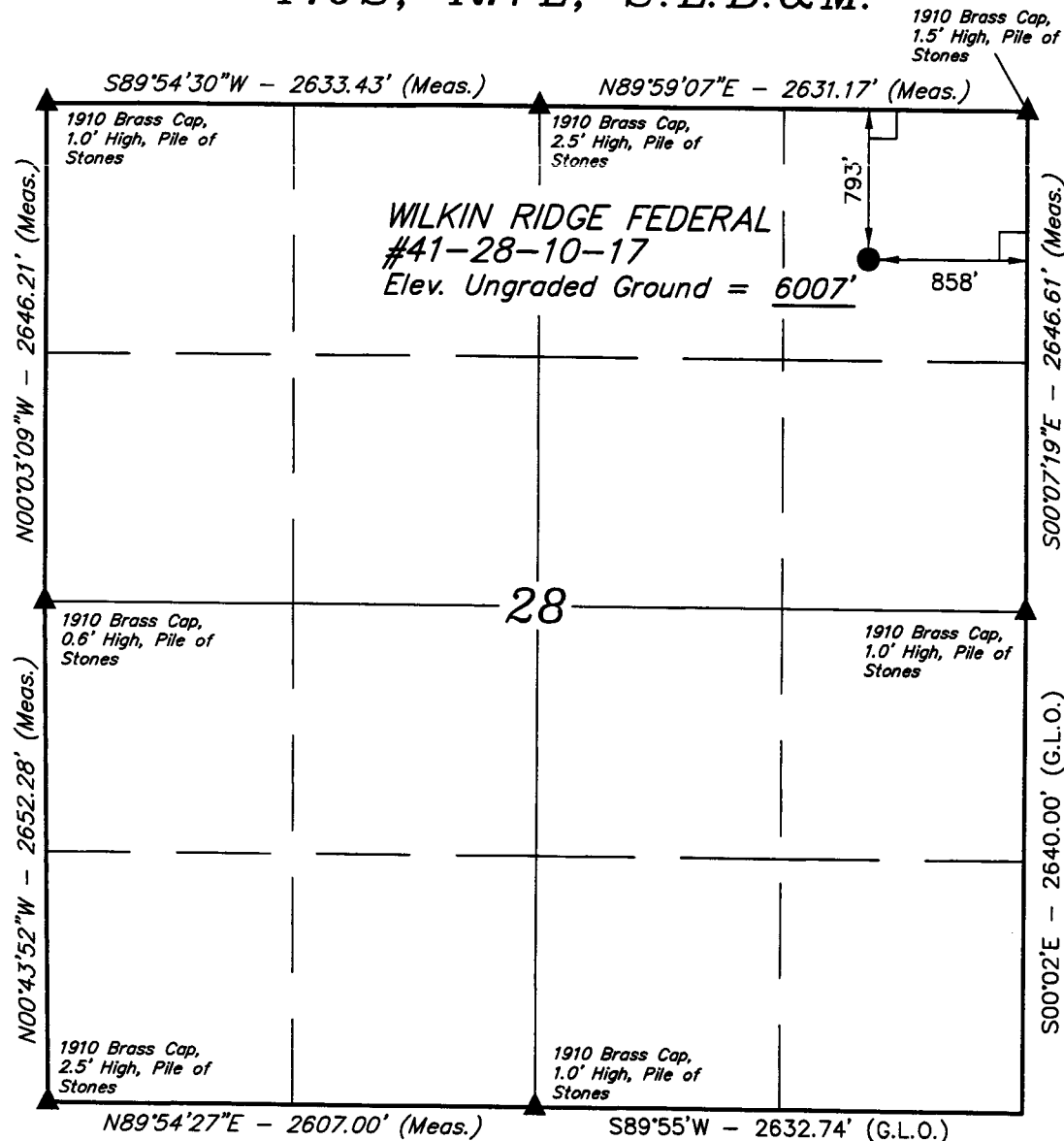
Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: **01-03-07**  
By: *[Signature]*

Federal Approval of this  
Action Is Necessary

RECEIVED  
DEC 26 2006  
DIV. OF OIL, GAS & MINING

T10S, R17E, S.L.B.&M.



**LEGEND:**

- └─ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

**BASIS OF BEARINGS**

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

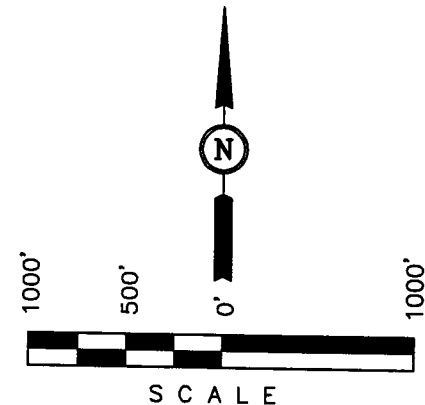
(AUTONOMOUS NAD 83)  
 LATITUDE = 39°55'12.13" (39.920036)  
 LONGITUDE = 110°00'18.47" (110.005131)  
 (AUTONOMOUS NAD 27)  
 LATITUDE = 39°55'12.26" (39.920072)  
 LONGITUDE = 110°00'15.93" (110.004425)

**GASCO PRODUCTION COMPANY**

Well location, WILKIN RIDGE FEDERAL #41-28-10-17, located as shown in the NE 1/4, NE 1/4 of Section 28, T10S, R17E, S.L.B.&M. Duchesne County, Utah.

**BASIS OF ELEVATION**

SPOT ELEVATION LOCATED IN THE SW 1/4 OF SECTION 20, T10S, R17E, S.L.B.&M. TAKEN FROM THE WILKIN RIDGE, QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6275 FEET.



**CERTIFICATE**

THIS IS TO CERTIFY THAT THE ABOVE WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



REVISED: 07-18-06

**UINTAH ENGINEERING & LAND SURVEYING**  
 85 SOUTH 200 EAST - VERNAL, UTAH 84078  
 (435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 02-13-06	DATE DRAWN: 02-14-06
PARTY J.F. N.H. L.K.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE GASCO PRODUCTION COMPANY	

## APPLICATION FOR PERMIT TO DRILL OR REENTER

### 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.  
**Attached.**
2. A Drilling Plan  
**Attached.**
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the Appropriate Forest Service Office.  
**See Surface Use Plan Attached.**
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20).  
**Bond coverage for this well is provided by Gasco Production Company under their BLM Bond No. Bond No. UT-1233.**
5. Operator certification.  
**Please be advised that Gasco Production Company is considered to be the operator of the above mentioned well. Gasco Production Company agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the leased lands.**
6. Such other site specific information and/or plans as may be required by the authorized officer.

ONSHORE OIL & GAS ORDER NO. 1  
Approval of Operations on Onshore  
Federal and Indian Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1: **ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS**

<i>Formation</i>	<i>Depth</i>	<i>Subsea</i>
Wasatch	5,055'	1,000'
Mesaverde	9,120'	-3,240'
Castlegate	11,745'	-5,870'
Blackhawk	11,995'	-6,140'
Aberdeen	12,605'	-6,830'
T.D.	12,905'	-7,130'

2. **ESTIMATED DEPTH OF ANTICIPATED WATER, OIL, GAS OR MINERAL FORMATIONS:**

<i>Substance</i>	<i>Formation</i>	<i>Depth</i>
Gas	Wasatch	5,400' - 9,120'
Gas	Mesaverde	9,120' - 11,745'
Gas	Blackhawk	11,995' - 12,805'

All fresh water prospectively valuable minerals encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.



### 3. **PRESSURE CONTROL EQUIPMENT**

Gasco Production Company's minimum specifications for pressure control equipment are as follows:

Ram Type: 11" Hydraulic double with annular, 5000 psi w.p.

Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed-off pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10 percent in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.

Annular type preventers (if used) shall be tested to 50 percent of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.

As a minimum, the above test shall be performed:

- a. when initially installed;
- b. whenever any seal subject to test pressure is broken
- c. following related repairs; and
- d. at 30-day intervals

Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.

When testing the kill line valve(s) the check valve shall be held open or the ball removed.

Annular preventers shall be functionally operated at least weekly.

Pipe and blind rams shall be activated each trip, however, this function need not be performed more than once a day.

A BOPE pit level drill shall be conducted weekly for each drilling crew.

Pressure tests shall apply to all related well control equipment.

All of the above described tests and/or drills shall be recorded in the drilling log.



BOP systems shall be consistent with API RP53. Pressure tests will be conducted before drilling out from under casing strings which have been set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection will be recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

The District Office should be notified, with sufficient lead time, in order to have the BLM representative on location during pressure testing.

- a. The size and rating of the BOP stack is shown on the attached diagram. Although a rig has not been chosen to drill this well, most of the equipment for this depth of hole in the area use a 11", 5000 psi working pressure blowout preventor.
- b. A choke line and a kill line are to be properly installed. The kill line is not to be used as a fill-up line.
- c. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
- d. Drill string safety valve(s), to fit all tools in the drill string, are to be maintained on the rig floor while drilling operations are in progress.

**4. PROPOSED CASING AND CEMENTING PROGRAM:**

- a. The proposed casing and cementing program shall be conducted as approved to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. Determination of casing setting depth shall be based on all relevant factors, including; presence/absence of hydrocarbons; fracture gradients; usable water zones; formation pressures; lost circulation zones; other minerals; or other unusual characteristics. All indications of usable water shall be reported.
- b. Casing design shall assume formation pressure gradients of 0.44 to 0.50 psi per foot for exploratory wells (lacking better data).



- c. Casing design shall assume fracture gradients from 0.70 to 1.00 psi per foot for exploratory wells (lacking better data)
- d. Casing collars shall have a minimum clearance of 0.422 inches of all sides in the hole/casing annulus, with recognition that variances can be granted for justified exceptions.
- e. All waiting on cement times shall be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.
- f. All casing except the conductor casing, shall be new or reconditioned and tested used casing that meets or exceeds API standards for new casing.
- g. The surface casing shall be cemented back to surface either during the primary cement job or by remedial cementing.
- h. All indications of usable water shall be reported to the authorized officer prior to running the next string of casing or before plugging orders are requested, whichever occurs first.
- i. Three centralizers will be run on the bottom three joints of surface casing with a minimum of one centralizer per joint starting with the shoe joint.
- j. Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a suitable preflush fluid, inner string cement method, etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.
- k. All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or 1500 psi, whichever is greater, but not to exceed 70 percent of the minimum internal yield. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken.
- l. On all exploratory wells, and on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.





ONSHORE ORDER NO. 1  
 Gasco Production Company  
Wilkin Ridge Federal #41-28-10-17  
 793' FNL and 858' FEL  
 NE NE Section 28, T10S - R17E  
 Duchesne County, Utah

CONFIDENTIAL - TIGHT HOLE

Lease No. UTU-75085

DRILLING PROGRAM

Page 5

m. The proposed casing program will be as follows:

<b>Purpose</b>	<b>Depth</b>	<b>Hole Size</b>	<b>O.D.</b>	<b>Weight</b>	<b>Grade</b>	<b>Type</b>	<b>New/Used</b>
Conductor	0-200'	17-1/2"	13-3/8"	48#	H-40	---	New
Surface	0-3,605'	12-1/4"	8-5/8"	32#	J-55	ST&C	New
Production	0- 12,905'	7-7/8"	4-1/2"	13.5#	P-110	LT&C	New

n. Casing design subject to revision based on geologic conditions encountered.

o. The cement program will be as follows:

<b>Conductor</b>	<b>Type and Amount</b>
TOC @ Surface	200 sxs Premium Type 5 mixed @ 15.6 ppg, 1.18 yield
<b>Surface</b>	<b>Type and Amount</b>
TOC @ Surface	Lead: 607 sx Hi-Lift @ 11 ppg, 3.91 yield Tail: 185 sx 10-2 RFC @ 14.2 ppg, 1.63 yield
<b>Production</b>	<b>Type and Amount</b>
TOC @ 2,500'	Lead: 523 sx Hi-Lift @ 11.5 ppg, 3.05 yield Tail: 1309 sx 50:50 Poz @ 14.1 ppg, 1.28 yield

p. Anticipated cement tops will be reported as to depth; not the expected number of sacks of cement to be used. The District Office should be notified, with sufficient lead time, in order to have a BLM representative on location while running all casing strings and cementing.

q. After cementing but before commencing any test, the casing string shall stand cemented until the cement has reached a compressive strength of at least 500 psi at the shoe. WOC time shall be recorded in the driller's log.

r. The following reports shall be filed with the District Manager within 30 days after the work is completed.



1. Progress reports, Form 3160-5 (formerly 9-331) "Sundry Notices and Reports on Wells", must include complete information concerning:
  - a. Setting of each string of casing, showing the size, grade, weight of casing set, hole size, setting depth, amounts and type of cement used, whether cement circulated or the top of the cement behind the casing, depth of cementing tools used, casing test method and results, and the date work was done. Show the spud date on the first reports submitted.
  - b. Temperature or bond logs must be submitted for each well where the casing cement was not circulated to the surface.
- s. Auxiliary equipment to be used is as follows:
  1. Kelly cock
  2. No bit float is deemed necessary.
  3. A sub with a full opening valve.

5. **MUD PROGRAM**

- a. The proposed circulating mediums to be employed in drilling are as follows:

<i><b>Interval</b></i>	<i><b>Mud Type</b></i>	<i><b>Mud Wt.</b></i>	<i><b>Visc.</b></i>	<i><b>F/L</b></i>	<i><b>PH</b></i>
0 - 200'	Fresh Water	8.33	1	---	7
200' - 3,605'	Fresh Water	8.33	1	---	7-8
3,605' - TD	Fresh Water & DAP	9.0-11.5	30-40	12-20	8

There will be sufficient mud on location to control a blowout should one occur.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, static filtration loss, and Ph.



- b. Mud monitoring equipment to be used is as follows:
  - 1. Periodic checks will be made each tour of the mud system. The mud level will be checked visually.
- c. No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.
- d. No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.
- e. The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

**6. EVALUATION PROGRAM**

The anticipated type and amount of testing, logging and coring are as follows:

- a. No drill stem tests are anticipated, however, if DST's are run, the following requirements will be adhered to:

Initial opening of drill stem test tools shall be restricted to daylight hours unless specific approval to start during other hours is obtained from the authorized officer. However, DST's may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e. lighting which is adequate for visibility and vapor-proof for safe operations). Packers can be released, but tripping shall not begin before daylight, unless prior approval is obtained from the authorized officer. Closed chamber DSTs may be accomplished day or night.

A DST that flows to the surface with evidence of hydrocarbons shall be either reversed out of the testing string under controlled surface conditions. This would involve provided some means for reverse circulation.

Separation equipment required for the anticipated recovery shall be properly installed before a test starts.



All engines within 100 feet of the wellbore that are required to "run" during the test shall have spark arresters or water cooled exhausts.

- b. The logging program will consist of a Schlumberger Platform Express to be run from TD - base of surface casing.
- c. No cores are anticipated.
- d. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with form 3160-4. Samples (cutting, fluids, and/or gases) will be submitted when requested by the authorized officer (AO).
- e. The anticipated completion program will be as follows: Perform multistage fracs on all productive Blackhawk, Mesaverde and Wasatch zones present in wellbore. Produce all zones commingled.
- f. Daily drilling and completion progress reports shall be submitted to the BLM in Vernal on a weekly basis.

**7. ABNORMAL TEMPERATURES OR PRESSURES**

- a. The expected bottom hole pressure is 7227 psi. The maximum bottom hole temperature anticipated is 219 degrees F
- b. No hydrogen sulfide gas is anticipated and no abnormal pressures or temperatures are anticipated.

**8. ANTICIPATED STARTING DATES AND NOTIFICATION OF OPERATIONS**

- a. Drilling is planned to commence upon approval of this application.
- b. It is anticipated that the drilling of this well will take approximately 35 days.



- c. The BLM in Vernal, Utah shall be notified of the anticipated date of location construction commencement and of anticipated spud date.
- d. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.
- e. The spud date will be reported orally to the AO within 48 hours after spudding. If the spudding occurs on a weekend or holiday, the report will be submitted on the following regular work day. The oral report will be followed up with a Sundry Notice.
- f. In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 3160-6 "Monthly Report of Operations", starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report will be filed with the Vernal BLM District Office, 170 South 500 East, Vernal, UT 84078.
- g. Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.
- h. If a replacement rig is contemplated for completion operations, a "Sundry Notice" Form 3160-5 to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.
- i. Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communications, not later than 5 days following the date on which the well is placed on production.
- j. Pursuant to Onshore Order No. 7, with the approval of the District Engineer, produced water may be temporarily disposed of into unlined pits for a period of up to 90 days. During the period so authorized, an application for approval of the permanent disposal method, along with the required water analysis and other information, must be submitted to the District Engineer.
- k. Pursuant to NTL-4A, lessees or operators are authorized to vent/flare gas during initial well evaluation tests, not exceeding a period of 30 days or the production of 50 MMCF of gas, whichever occurs first. An application must be filed with the District Engineer and approval received, for any venting/flaring of gas beyond the initial 30 day or authorized test period.

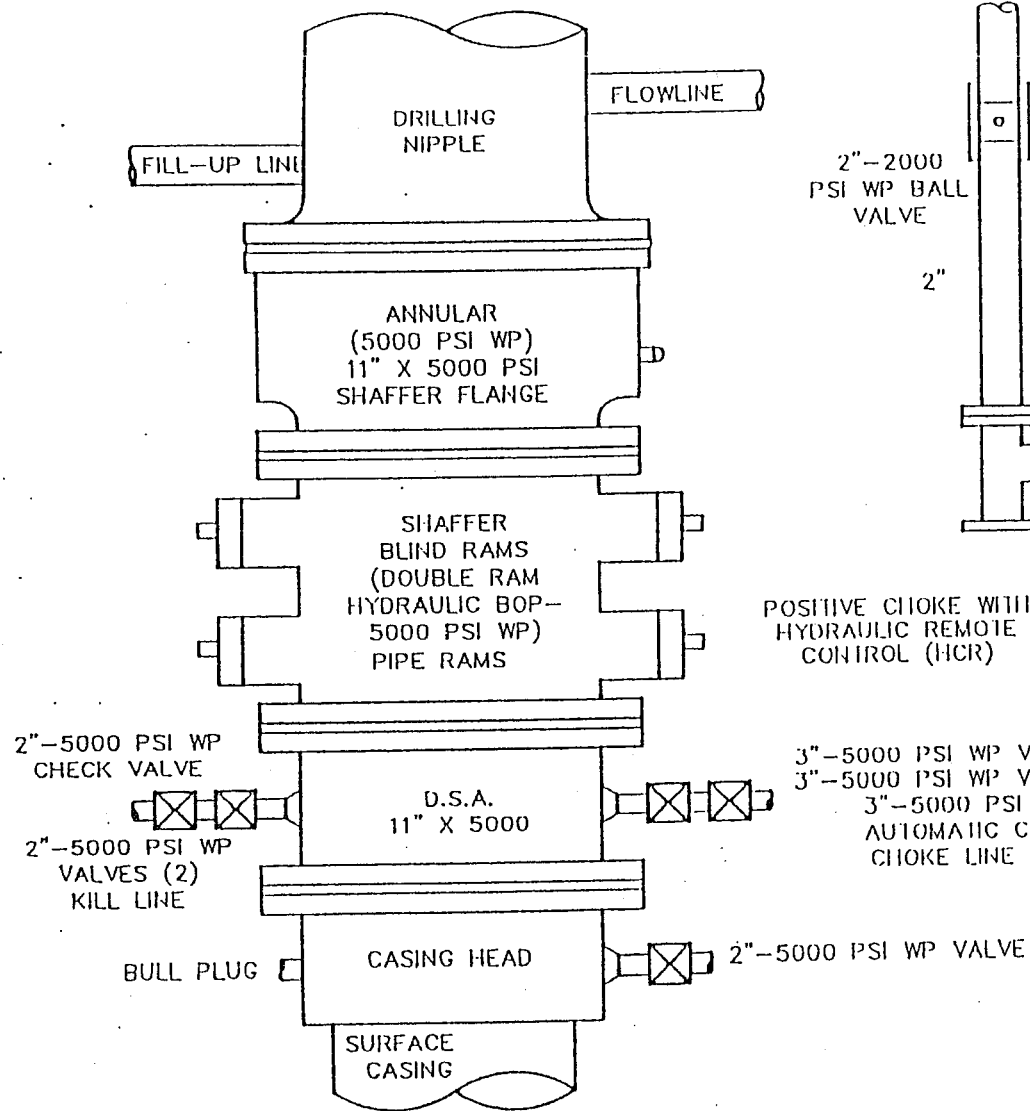


- i. A schematic facilities diagram as required by 43 CFR 3162.7-5 (b.9.d.), shall be submitted to the appropriate District Office within sixty (60) days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-5 (b.4.).
- m. A first production conference will be scheduled within 15 days after receipt of the first production notice.
- n. No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the SO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within 30 days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.
- o. Pursuant to Onshore Oil and Gas Order No. 1, lessees and operators have the responsibility to see that their exploration, development, production, and construction operations are conducted in a manner which conforms with applicable Federal laws and regulations and with State and local laws and regulations to the extent that such State and local laws are applicable to operations on Federal or Indian lands.

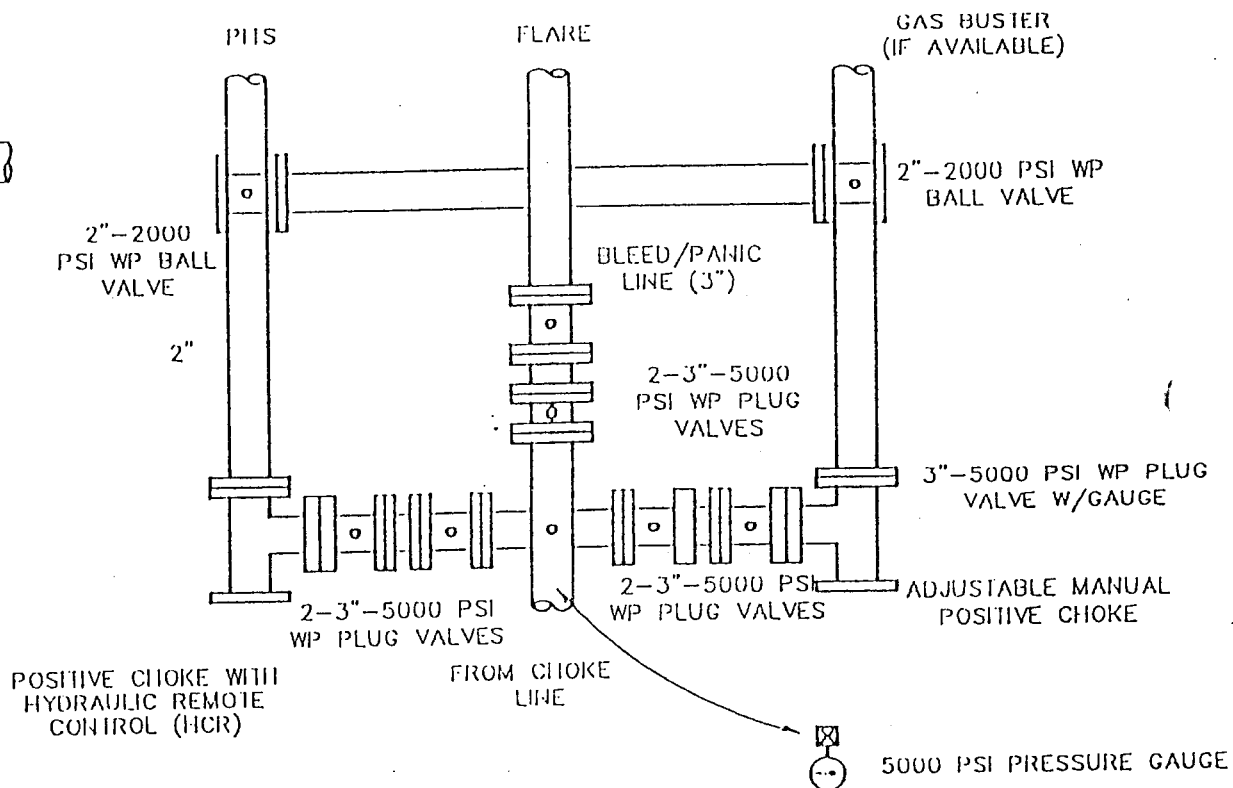
Bureau of Land Management 170 South 500 East Vernal, Utah 84078 Phone: 435/781-4400 Fax: 435/781-4410 After Hours:		
Matt Baker	Petroleum Engineer	435/828-4470
Michael Lee	Petroleum Engineer	435/828-7875



# BOP SCHEMATIC 5000 PSI WORKING PRESSURE



## PLAN VIEW CHOKE MANIFOLD



THE HYDRAULIC CLOSING UNIT WILL BE LOCATED MORE THAN 30' FROM THE WELLHEAD. CHOKE AND BLEED/PANIC LINES WILL GO TO THE PIT AND FLARE. ALL CONNECTIONS IN CHOKE LINES AND MANIFOLD WILL BE FLANGED OR WELDED. ALL FLANGES SHOULD BE RING JOINT GASKET TYPE. ALL TURNS IN LINES SHALL BE CONSTRUCTED USING TARGETING 90° TEES OR ELLS. ALL LINES SHALL BE ANCHORED.

ONSHORE ORDER NO. 1  
Gasco Production Company  
**Wilkin Ridge Federal #41-28-10-17**  
793' FNL and 858' FEL  
NE NE Section 28, T10S - R17E  
Duchesne County, Utah

~~CONFIDENTIAL~~ - TIGHT HOLE

Lease No. UTU-75085

**SURFACE USE PLAN**

Page 1

**ONSHORE OIL & GAS ORDER NO. 1  
NOTIFICATION REQUIREMENTS**

Location Construction -	forty-eight (48) hours prior to construction of location and access roads.
Location Completion -	prior to moving on the drilling rig.
Spud Notice -	at least twenty-four (24) hours prior to spudding the well.
Casing String and Cementing -	twenty-four (24) hours prior to running casing and cementing all casing strings.
BOP and Related Equipment Tests -	twenty-four (24) hours prior to initiating pressure tests.
First Production - Notice	within five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

\* Following the onsite inspection, this location was moved approximately 212 feet southeast to avoid a sage grouse lek.

The onsite inspection for the subject well site was conducted on Wednesday, April 12, 2006 at approximately 12:30 p.m. Weather conditions were clear, warm and breezy. In attendance at the onsite inspection were the following individuals:

Chris Carusona	Natural Resource Specialist	Bureau of Land Management
Brandon McDonald	Wildlife Biologist	Bureau of Land Management
Venessa Langmacher	Permitting Agent	Permitco Inc.
Randy Smith	Field Assistant	Permitco Inc.
Jesse Walton	Surveyor	Uintah Engineering and Land Surveying
Shawn Elworthy	Field Supervisor	Gasco Production Company

**1. EXISTING ROADS**

a. The proposed well site is located approximately 23.65 miles south of Myton, Utah.





- b. Directions to the location from Myton, Utah are as follows:

Proceed in a southeasterly direction from Myton, Utah for approximately 12.7 miles to the Castle Peak Mine. Stay right and continue southerly for 6.6 miles. Turn right and proceed southerly 3.8 miles. Turn left and proceed easterly 0.25 miles. Turn slight left onto the proposed access and proceed easterly 0.3 miles until reaching the proposed location.

- c. For location of access roads within a 2-Mile radius, see Maps A & B.
- d. Improvement to existing main roads will not be required.
- e. All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.
- f. Existing roads and newly constructed roads on surface under the jurisdiction of any Surface Managing Agency shall be maintained in accordance with the standards of the SMA.

## **2. PLANNED ACCESS ROADS**

- a. There will be 0.3 miles of new access to be constructed.
- b. The maximum grade is approximately 3%.
- c. No turnouts are planned.
- d. No culverts or low water crossings will be necessary
- e. The access road was centerline surveyed at the time of staking.
- f. The use of surfacing material is not anticipated, however it may be necessary depending on weather conditions.
- g. No cattle guards will be necessary.
- h. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.



- i. Access roads and surface disturbing activities will conform to standards outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development, (1989).
- j. The road will be constructed/upgraded to meet the standards of the anticipated traffic flow and all weather road requirements. Construction/upgrading shall include ditching, draining, graveling, crowing and capping the roadbed as necessary to provide a well constructed safe road. Prior to upgrading, the road shall be cleared of any snow cover and allowed to dry completely. Traveling off the 30 foot right-of-way will not be allowed. Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing nor shall the drainages be blocked by the roadbed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around them avoided.
- k. No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.
- l. Road right of way will not be needed. All new access is within the lease boundary.

3. **LOCATION OF EXISTING WELLS WITHIN A 1-MILE RADIUS OF THE PROPOSED LOCATION.**  
(See Map "C")

- a. Water wells - none
- b. Injection wells - none
- c. Producing wells - none
- d. Drilling wells - none
- e. Shut-in wells - none
- f. Temporarily abandoned wells - none
- g. Disposal wells -none



- h. Abandoned wells - two
- i. Dry Holes - none

**4. LOCATION OF TANK BATTERIES AND PRODUCTION FACILITIES.**

- a. All permanent structures (onsite for six months or longer) constructed or installed (including oil well pump jacks) will be painted Carlsbad Canyon. All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded.
- b. If storage facilities/tank batteries are constructed on this lease, the facility/battery or the well pad shall be surrounded by a containment dike of sufficient capacity to contain at a minimum, the entire contents of the largest tank within the facility/battery, unless more stringent protective requirements are deemed necessary by the authorized officer.
- c. If production is established, a production facility diagram will be submitted via Sundry Notice.
- d. All loading lines will be placed inside the berm surrounding the tank battery.
- e. Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flow line will be buried or anchored down from the wellhead to the separator. Meter runs will be housed and/or fenced.
- f. The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal Field Office. All meter measurement facilities will conform with Onshore Oil and Gas Order No. 4 for liquid hydrocarbons and Onshore Oil and Gas Order No. 5 for natural gas measurement.
- g. If at any time the facilities located on public land and authorized by the terms of the lease are no longer included in the lease (due to a contraction in the unit or other lease or unit boundary change), BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental or other financial obligation as determined by the authorized officer.



- h. Any necessary pits will be properly fenced to prevent any wildlife entry.
- i. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.
- j. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.
- k. All access roads will be maintained as necessary to prevent erosion and accommodate year-round traffic.
- l. The road will be maintained in a safe useable condition.
- m. Produced water will be stored in a 300 bbl heated, insulated tank, then hauled to a commercial disposal site such as Disposal Inc., or Brennan Bottom.
- n. Pipelines will follow the route shown on Map D. See Pipeline detail attached. Pipeline right of way will be necessary for the portion of pipeline located outside of the lease boundary. We are requesting that this APD be used as our application for pipeline ROW. Please notify us once a category determination has been made so that we can send the necessary filing fees.

**5. LOCATION AND TYPE OF WATER SUPPLY**

- a. The proposed water source will be the Nebecker Water Station in Myton. The Water Use Claim # is 43-1721. In addition, recycled water from other drilling or producing wells will be utilized.
- b. Water will be hauled by Nebecker Water Service to the location over the access roads shown on Maps A and B.
- c. No water well will be drilled on this lease.

**6. SOURCE OF CONSTRUCTION MATERIAL**

- a. Surface and subsoil materials in the immediate area will be utilized.
- b. Any gravel used will be obtained from a commercial source.



- c. The use of materials under BLM jurisdiction will conform with 43 CFR 3610.2.3. Construction material will not be located on lease.
- d. No construction materials will be removed from Federal land.

**7. METHODS OF HANDLING WASTE DISPOSAL**

- a. The reserve pit will be constructed so as not to leak, break, or allow discharge.
- b. At the request of the BLM, the reserve pit will be lined with a 12 mil liner. If fractured rock is encountered, the pit will be first lined with sufficient bedding (either straw or dirt) to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe, etc., that could puncture the liner will be disposed of in the pit. More stringent protective requirements may be deemed necessary by the A.O.
- c. Burning will not be allowed. All trash will be contained in a trash cage and its contents removed at the end of drilling operations and hauled to an approved disposal sight.
- d. After first production, produced waste water will be confined to a unlined pit or storage tank for a period not to exceed ninety (90) days. During the 90-day period, in accordance with Onshore Order No. 7, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the AO's approval. Failure to file an application within the time allowed will be considered an incident of noncompliance.
- e. Drill cuttings are to be contained and buried in the reserve pit.
- f. Any salts and/or chemicals which are an integral part of the drilling system will be disposed of in the same manner as the drilling fluid.
- g. A chemical porta-toilet will be furnished with the drilling rig.
- h. The produced fluids will be produced into a test tank until such time as construction of production facilities is completed. Any spills of oil, gas salt water or other produced fluids will be cleaned up and removed.



**8. ANCILLARY FACILITIES**

There are no airstrips, camps, or other facilities planned during the drilling of the proposed well.

**9. WELL SITE LAYOUT**

- a. The operator or his/her contractor shall contact the BLM Office at 435/781-4400 forty-eight (48) hours prior to construction activities.
- b. The reserve pit will be located on the southwest side of the location.
- c. The flare pit will be located on the north side of the reserve pit, a minimum of 100 feet from the well head and 30 feet from the reserve pit fence.
- d. The stockpiled topsoil (first six inches) will be stored on the north side of the location, between Corners 7 and 9. Topsoil along the access route will be wind rowed on the uphill side.
- e. Access to the well pad will be from the south as shown on the Pit & Pad Layout.
- f. See Location Layout for orientation of rig, cross section of drill pad and cuts and fills.
- g. The location of mud tanks; reserve pit, trash cage; pipe racks; living facilities and soil stockpiles will be shown on the Location Layout.
- h. All pits will be fenced according to the following minimum standards:
  1. 39 inch net wire shall be used with at least one strand or barbed wire on top of the net wire (barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence).
  2. The net wire shall be no more than 2-inches above the ground. The barbed wire shall be 3-inches above the net wire. Total height of the fence shall be at least 42-inches.
  3. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.



4. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 feet.
5. All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.
- i. The reserve pit fencing will be on three sides during drilling operations and on the fourth side when the rig moves off the location. Pits will be fenced and maintained until cleanup.

**10. PLANS FOR RESTORATION OF SURFACE**

Producing Location

- a. Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash and junk not required for production.
- b. Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with 43 CFR 3162.7-1.
- c. If a plastic nylon reinforced liner is used it shall be torn and perforated before backfilling of the reserve pit.
- d. The reserve pit and that portion of the location not needed for production facilities or operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 120 days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed and all cans, barrels, pipe, etc., will be removed.
- e. Reclamation of unused disturbed areas on the well pad/access road no longer needed for operations, such as cut slopes, and fill areas will be accomplished by grading, leveling and seeding as recommended by the Authorized Officer. The following seed mixture has been requested by the Bureau of Land Management.

<b><i>Species</i></b>	<b><i>Pounds PLS/Acres</i></b>
Western Wheatgrass	6
Galletta	6
TOTAL	12



Seeding will be performed immediately after the location has been reclaimed and the pit has been backfilled, regardless of the time of year. Seed will be broadcast and walked in with a dozer.

- f. The topsoil stockpile will be seeded as soon as the location has been constructed with the same recommended seed mix. The seed will be walked in with a cat.

Dry Hole

- g. At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and BLM will attach the appropriate surface rehabilitation conditions of approval.

Interim Surface Reclamation will be as follows:

1. Immediately after final well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production operations.
2. Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in the reserve pit will be removed. Other waste and spoil materials will be disposed of immediately, weather permitting, upon final well completion.
3. If a synthetic, nylon re-enforced, liner is used, the excess liner will be cut off and removed and the remaining liner will be torn and perforated while backfilling the reserve pit. Alternatively, the pit will be pumped dry, the liner folded into the pit, and the pit backfilled. The liner will be buried to a minimum of four (4) feet deep.
4. The reserve pit will be reclaimed within 180 days from the date of final well completion, weather permitting.
5. The reserve pit and that portion of the location not needed for production and storage facilities, and everyday production operations, will be reshaped to the approximate original contours to the extent possible. This will be completed by backfilling and crowning the pit to prevent water from standing. Topsoil will be re-spread up to the rig anchor points, excluding the area needed for production and storage facilities and everyday production operations. Re-seeding, using appropriate reclamation methods, will occur immediately following the re-spreading of topsoil, weather permitting. The Authorized Officer will provide a seed mixture to re-vegetate the reserve pit and other unused disturbed areas at the time of the onsite.





**11. SURFACE OWNERSHIP**

Access Roads - The majority of the access roads are maintained by the County Road Department or the Bureau of Land Management.

Well pad - The well pad is located on lands managed by the BLM.

**12. OTHER INFORMATION**

- a. A Class III archeological survey has been conducted by Grand River Institute. A copy of this report is attached.
- b. A Paleontological Evaluation has been conducted by Alden Hamblin and is on file with the Bureau of Land Management.
- c. The operator is responsible for informing all persons in the areas who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

-whether the materials appear eligible for the National Register of Historic Places;

-the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and

-a time frame for the AO to complete and expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that required mitigation has been completed, the operator will then be allowed to resume construction.



- d. The operator will control noxious weeds along rights-of-way for roads, pipelines, well sites, or other applicable facilities. A list of noxious weeds may be obtained from the BLM, or the appropriate County Extension Office. On BLM administered land it is required that a Pesticide Use Proposal shall be submitted, and given approval, prior to the application of herbicides or other pesticides or possible hazardous chemicals.
- e. Drilling rigs and/or equipment used during drilling operations on this wellsite will not be stacked or stored on Federal Lands after the conclusion of drilling operations or at any other time without BLM authorization. However, if BLM authorization is obtained, it is only a temporary measure.
- f. All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved plan of operations, and any applicable Notice to Lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.
- g. A complete copy of the approved APD shall be on location during construction of the location and drilling activities.
- h. There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended or abandoned will be identified in accordance with 43 CFR 3162.
- i. "Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.
- j. This permit will be valid for a period of one year from the date of approval. An extension period may be granted, if requested, prior to the expiration of the original approval period. After permit termination, a new application will be filed for approval for any future operations.
- k. The operator or his contractor shall contact the BLM Offices at 435/781-4400 48 hours prior to construction activities.
- l. The BLM Office shall be notified upon site completion prior to moving on the drilling rig.



ONSHORE ORDER NO. 1  
Gasco Production Company  
**Wilkin Ridge Federal #41-28-10-17**  
793' FNL and 858' FEL  
NE NE Section 28, T10S - R17E  
Duchesne County, Utah

CONFIDENTIAL - TIGHT HOLE

Lease No. UTU-75085

**SURFACE USE PLAN**

Page 12

13. **LESSEE'S OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION**

Permit Matters

**PERMITCO INC.**  
14421 County Road 10  
Ft. Lupton, CO 80621  
303/857-9999 (O)  
303/857-0577 (F)  
Lisa Smith

Drilling & Completion Matters

**Gasco Production Company**  
8 Inverness Drive East, Suite 100  
Englewood, CO 80112  
John Longwell  
303/483-0044 (O)  
303/ 483-0011(F)


Shawn Elworthy  
Roosevelt, UT  
(Cell) 435-823-4272

**CERTIFICATION**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Gasco Production Company and its contractors and subcontractors in conformity with the plan and the terms and conditions under which it is approved.

This statement is subject to the provisions of 18.U.S.C. 1001 for the filing of a false statement.

August 11, 2006  
Date:

  
\_\_\_\_\_  
Tabatha Parker - PERMITCO INC.  
Authorized Agent for:  
Gasco Production Company



— PIPELINE INFORMATION —  
***Wilkin Ridge Federal #41-28-10-17***

1. The type of pipeline is a single well flow line.
2. The outside diameter (O.D.) of all will be 8 inches maximum.
3. The anticipated production through the line is approximately 2000 MCF per day.
4. The anticipated maximum test pressure is 1000 psi.
5. The anticipated operating pressure is 100-200 psi.
6. The type of pipe is steel.
7. The method of coupling is welded.
8. There are no other pipelines to be associated in same right of way.
9. There will be other objects to be associated in the same right of way. (Risers, Pig Launchers Pig Traps, meters and other appurtenances as required.)
10. The total length of pipeline is approximately 9,570'. (Approximately 4520' off lease and 5050' on lease.)
11. Due to the rocky nature of the area, and shallow soils, the line will be laid on the surface as shown on Map D. The pipeline will follow existing or proposed roads.
12. The construction width for total surface disturbing activities is 30 feet.
13. The estimated total acreage involving all surface disturbing activities is 6.59 acres
14. Any surface disturbance created as a result of the pipeline construction will be reclaimed utilizing the reclamation procedures and seed mixture specified by the Bureau of Land Management.
15. The line will be tested with gas pressure to 1000 psi.



**FEDERAL STIPULATIONS**

No Drilling or Construction operations will be allowed from March 1<sup>st</sup> through June 30<sup>th</sup> for the protection of Sage Grouse.



**Class III Cultural Resource Inventory Report  
of  
Seven Proposed Well Locations and Related Linear Routes (1.4 miles)  
in Duchesne County, Utah  
for  
Gasco Production Company**

Declaration of Negative Findings

GRI Project No. 2612  
7 March 2006

Prepared by

Grand River Institute  
P.O. Box 3543  
Grand Junction, Colorado 81502  
BLM Antiquities Permit No.05UT54939  
UDSH Project Authorization No. U06-GB-0120b

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Carl E. Conner, Principal Investigator

Submitted to

The Bureau of Land Management  
Vernal District Office  
170 South 500 East  
Vernal, Utah 84078

## **Abstract**

Grand River Institute conducted a Class III cultural resources inventory for Gasco Production Company of seven proposed Wilkin Ridge well locations (Fed. #33-19-10-17, Fed. #43-20-10-17, Fed. #11-21-10-17, Fed. #41-21-10-17, Fed. #41-28-10-17, Fed. #23-28-10-17, and Fed. #41-31-10-17) and 1.4 miles of linear routes (roads and/or pipelines) in Duchesne County, Utah, under BLM Antiquities Permit No. 05UT-54939 and Utah Division of State History (UDSH) Project Authorization No. U06-GB-0120b. This work was done to meet requirements of Federal laws that protect cultural resources.

Files searches conducted through the BLM Vernal Field Office (BLM) and through Utah Division of State History indicated no sites were previously recorded in the project areas. Field work was performed on the 27<sup>th</sup> and 28<sup>th</sup> of February 2006. A total of about 104.25 acres (BLM ) was inspected. As a result no cultural resources were encountered. Accordingly, no significant historical properties were identified within the areas of direct impact and archaeological clearance is recommended for the proposed wells and linear routes.

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## Introduction

At the request of Gasco Production Company and the Bureau of Land Management Vernal Field Office (BLM), Grand River Institute (GRI) conducted a Class III cultural resources inventory for Gasco Production Company of seven proposed Wilkin Ridge well locations (Fed. #31-19-10-17, Fed. #43-20-10-17, Fed. #11-21-10-17, Fed. #41-21-10-17, Fed. #41-28-10-17, Fed. #23-28-10-17, and Fed. #41-31-10-17) and 1.4 miles of linear routes (roads and/or pipelines) in Duchesne County, Utah, under BLM Antiquities Permit No. 05UT-54939 and Utah Division of State History (UDSH) Project Authorization No. U06-GB-0120b. File searches conducted through the BLM Vernal Field Office (BLM) on the 27<sup>th</sup> of February 2006 and through UDSH indicated no sites had been previously recorded in the project areas. Field work was performed on the 27<sup>th</sup> and 28<sup>th</sup> of February 2006. A total of about 104.25 acres (BLM) was inspected. The file searches, survey and report were completed by Carl E. Conner (Principal Investigator), Barbara J. Davenport, and Dana Archuleta.

The survey was done to meet requirements of the Federal Land Policy and Management Act of 1976, the National Historic Preservation Act as amended in 1992, and the National Environmental Policy Act (NEPA) of 1969. These laws are concerned with the identification, evaluation, and protection of fragile, non-renewable evidences of human activity, occupation and endeavor reflected in districts, sites, structures, artifacts, objects, ruins, works of art, architecture, and natural features that were of importance in human events. Such resources tend to be localized and highly sensitive to disturbance.

## Location of Project Area

The study area's discrete units lie southwest of Vernal, Utah, Duchesne County. The 10-acre blocks surveyed for the proposed new well locations, and the 200-foot-wide corridors for the proposed new access roads and/or pipeline routes are listed in Table 1 and shown in Figure 1. Notably, the linear distances of the inventoried access and pipeline routes are calculated outside the 10-acre block inventory areas.

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**Table 1. List of well locations and linear routes.**

Well Designation	Land Status	Location
Fed. #33-19-10-17	BLM	T. 10 S., R. 17 E., Section 19 Access in Section 20
Fed. #43-20-10-17	BLM	T. 10 S., R. 17 E., Section 20

Well Designation	Land Status	Location
Fed. #11-21-10-17	BLM	T. 10 S., R. 17 E., Section 21 Linear route in Secs. 17 and 20
Fed. #41-21-10-17	BLM	T. 10 S., R. 17 E., Section 21
Fed. #41-28-10-17	BLM	T. 10 S., R. 17 E., Section 28
Fed. #23-28-10-17	BLM	T. 10 S., R. 17 E., Section 28 Linear route in Sec. 29
Fed. #41-31-10-17	BLM	T. 10 S., R. 17 E., Section 31

## Environment

The project areas are within the major geologic subdivision of the Colorado Plateau known as the Uinta Basin Section. In Utah, this section extends from the Uinta Mountains on the north to the Book Cliffs on the south. It is a broad downwarp into which Quaternary- and Tertiary-age deposits were made from the surrounding mountains which include Holocene and Pleistocene pediment deposits, and Eocene-age fluvial and lacustrine sedimentary rocks (Rigby 1976:xi). Physiographically, the basin includes the Uinta basin in the north portion and the Book Cliffs/Roan Plateau in the south portion. The lower Uinta Formation is the bedrock of the study area. Holocene and Pleistocene-age alluvium and colluvium occur as a veneer over the Uinta. It consists of channel and flood-plain stream deposits. Soils encountered were rocky, shaley, silty, and sandy loams, which are in general formed in residuum from the underlying formation. However, dunes are common in this region as well.

Elevations in the project area range from 5760-to-6380 feet. The terrain is characterized as bench land that is cut by dendritic washes. Vegetation is a shadscale desert community. Regional faunal inhabitants include deer, antelope, elk, black bear, coyote, mountain lion, cottontails, jack rabbits, and various raptors. A cool, mid-latitude steppe climate prevails. Annual precipitation of this elevation range is between 7 and 10 inches. Temperatures range from 100°F in the summer to -40°F in January.

Paleoenvironmental data are scant, but it is generally agreed that gross climatic conditions have remained fairly constant over the last 12,000 years. However, changes in effective moisture, and cooling-warming trends probably affected the prehistoric occupation of the region.

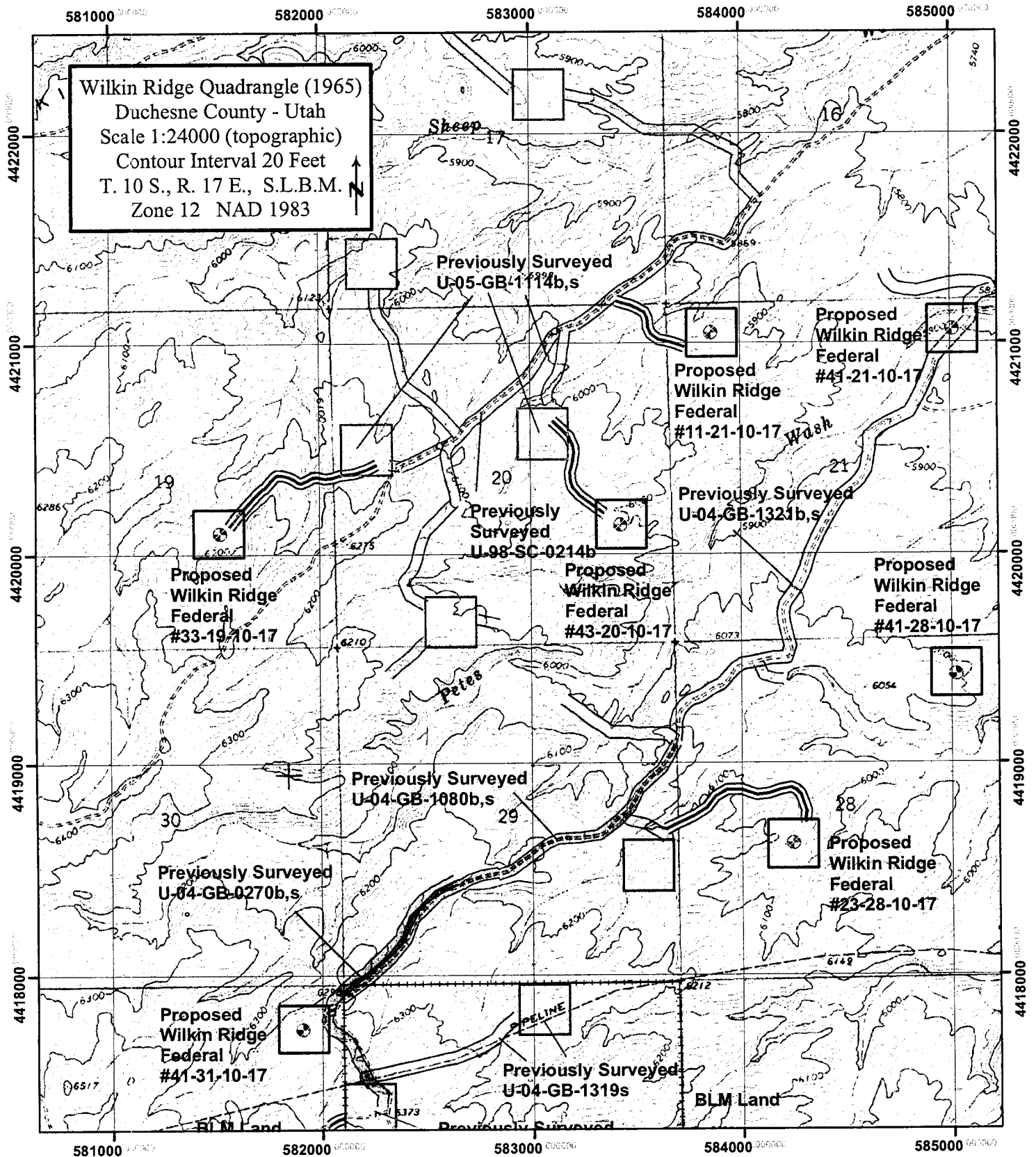


Figure 1. Project area map for the Class III cultural resources inventory of eight proposed Wilkin Ridge well locations and short linear routes (access and/or pipeline) in Duchesne County, Utah, for Gasco, Inc. Areas inventoried are highlighted. [GRI Project # 2612, 3/7/06, U06-GB-0120b]

## **Files Search**

Files searches were conducted through BLM and UDSH. Previous projects in the areas near the inventory blocks and linear routes are numerous and generally relate to oil and gas development. Those that are adjacent to the project areas are discussed below.

Projects that have previously inventoried the connecting access roads and 10-acre blocks include U98-SC-0214b, U04-GB-0270bs, U04-GB-1080bs, U04-GB-1321bs, and U05-GB-1114bs (Figure 1). Others that have been conducted in the general area include U81-PA-0801, U82-BC-0302, U85-BL-0740, U87-BL-0595, U98-SC-0214, and U99-SC-0357. Despite these and other inventories in the area, no cultural resources have been documented. Accordingly, few or none were expected to be found during the current study.

Regional archaeological studies suggest nearly continuous human occupation of northeastern Utah for the past 12,000 years. Evidence of the Paleoindian Tradition, the Archaic Tradition, Fremont Culture, and Protohistoric/Historic Utes has been found. Historic records suggest occupation or use by EuroAmerican trappers, settlers, miners, and ranchers as well. Overviews of the prehistory and history of the region are provided in the Utah BLM Cultural Resource Series No. 11, "Archaeological Inventory in the Seep Ridge Cultural Study Tract, Uintah County, Northeastern Utah with a Regional Predictive Model for Site Locations" (Larralde and Chandler 1980), and in "Cultural Resources Existing Data Inventory Vernal District, Utah" (Jones and Mackay 1980).

## **Study Objectives**

The purpose of the study was to identify and record all cultural resources within the areas of potential impact and to assess their significance and eligibility to the National Register of Historic Places (NRHP). The statements of significance included in this report are field assessments made in support of recommendations to the BLM and State Historic Preservation Officer (SHPO), and the final determination of site significance is made by the BLM in consultation with the SHPO.

Paleontological resources were also considered in the inspection. However, a final evaluation of those resources must be provided by a paleontologist permitted by Utah.

## **Field Methods**

A Class III, 100% pedestrian, cultural resources survey of the proposed well locations was made by walking a series of concentric circles around the flagged centers to diameters of 750 feet. The related access and pipeline routes not included within the 10-acre study plots were surveyed by walking four parallel transects spaced at 15m intervals and centered on the flagged lines to cover corridors 200 feet wide.

Cultural resources were sought as surface exposures and were characterized as sites or isolated finds. Sites were defined by the presence of six or more artifacts and/or significant feature(s) indicative of patterned human activity. Isolated finds were defined by the presence of 1 to 5 artifacts apparently of surficial nature. Cultural resources encountered were to be recorded to standards set by the Preservation Office of the Utah Division of State History (UDSH).

The basic approach to the data collection was the continuous mapping of observed artifacts and features by recording UTM coordinates (NAD 83 Datum) using a Trimble Geo XT. Site maps were created using corrected data and ARCMAP. Photographs were to be taken at each site and to include general views and specific artifacts or features. (No sites were recorded.) Field notes and photo negatives are filed at Grand River Institute, while the photographs are submitted to the BLM and UDSH. No artifacts were collected.

### **Study Findings and Management Recommendations**

As expected from the findings of the previous inventories, no significant historic properties were identified within the area of direct impact. Accordingly, archaeological clearance is recommended.

### **References**

Jones, Kevin T. and K.L. Mackay

1980 Cultural Resources Existing Data Inventory Vernal District, Utah. Report of Investigations 80-18, University of Utah, Salt Lake City.

Larralde, Signa L. and Susan M. Chandler

1980 Archaeological inventory in the Seep Ridge Cultural Study Tract, Uintah County, Utah. In: Utah BLM Cultural Resource Series No. 11. Bureau of Land Management, Salt Lake City.

Rigby, J. Keith

1976 Northern Colorado Plateau. Kendall/Hunt Publishing Company. Dubuque.

# ✦ Grand River Institute ✦

P.O. Box 3543 ✦ Grand Junction, CO 81502 ✦ 970/245-7868 FAX 970/245-6317

---

March 8, 2006

Gasco, Inc.  
8 Inverness Drive East  
Suite 100  
Englewood, CO 80112

Attn: Mike Decker

Re: GRI Project No. 2612 – Class III cultural resources inventory for Gasco Production Company of seven proposed Wilkin Ridge well locations (Fed. #33-19-10-17, Fed. #43-20-10-17, Fed. #11-21-10-17, Fed. #41-21-10-17, Fed. #41-28-10-17, Fed. #23-28-10-17, and Fed. #41-31-10-17) and 1.4 miles of linear routes (roads and/or pipelines) in Duchesne County, Utah

GRI Project No. 2614 – Class III cultural resources inventory for Gasco Production Company of two proposed Wilkin Ridge well locations (Fed. #12-33-10-17 and Fed. #23-33-10-17) and 1.67 miles of linear routes (roads and/or pipelines) in Duchesne County, Utah

Dear Mike:

Enclosed are two copies of our final reports for the above cited projects. Copies have been distributed as indicated below. Also enclosed is our invoice. Please call me if you have any questions or comments.

Sincerely,



Carl E. Conner  
Director

Enc.

Distribution:

2 of each – Blaine Phillips, BLM Vernal Field Office Archaeologist  
1 of each – Lisa Smith, Permitco  
2 of GRI#2614 – Kenny Wintch, Utah State Land Trust



**Summary Report of Cultural  
Resources Inspection**

**Project No.: U06-GB-0120b**  
**[GRI Project No. 2612]**

1. Report Title: **Class III cultural resources inventory for Gasco Production Company of seven proposed Wilkin Ridge well locations (Fed. #33-19-10-17, Fed. #43-20-10-17, Fed. #11-21-10-17, Fed. #41-21-10-17, Fed. #41-28-10-17, Fed. #23-28-10-17, and Fed. #41-31-10-17) and 1.4 miles of linear routes (roads and/or pipelines) in Duchesne County, Utah**
2. Report Date: **03/07/2006**
3. Date(s) of Survey: **02/27 and 28/2006**
4. Development Company: **Gasco Production Company**
5. Responsible Institution: **BLM Vernal Field Office**
6. Responsible Individuals Principal Investigator: Field Supervisor: **Carl E. Conner**  
Report Author(s): **Carl E. Conner and Barbara J. Davenport**
7. BLM Field Office: **Vernal Field Office**
8. County(ies): **Duchesne**
9. Fieldwork Location: **T. 10 S., R. 17 E., Sections 19, 20, 21, 28, 29 and 31; S.L.B.M.**
10. Record Search:

Location of Records Searched for BLM: **BLM Vernal, UDSH** Date: **02/27/2006**

11. Description of Proposed Project: **Seven well locations and 1.4 mile linear route**
12. Description of Examination Procedures: **A Class III, 100% pedestrian, cultural resources survey of the proposed well location was made by walking a series of concentric circles around the flagged center to a diameter of 750 feet. The linear routes were surveyed by walking four parallel transects spaced at 15m intervals and centered on the flagged lines to cover 200 foot-wide corridors.**

13. Area Surveyed:	BLM	OTHER FED	STATE	PRI.
<b>Linear Miles</b> Intensive:	<b>1.4</b>			
Recon/Intuitive:				
<b>Acreage</b> Intensive:	<b>70</b>			
Recon/Intuitive:				

14. Sites Recorded:

Smithsonian Site Numbers		#	BLM	OTHER FED	STATE	PRI.
Revisits (no IMACS form)	NR Eligible	0				
	Not Eligible	0				
Revisits updated IMACS)	NR Eligible	0				
	Not Eligible	0				
New Recordings	NR Eligible	0				
	Not Eligible	0				
Total Number of Archaeological Sites		0				
Historic Structures (USHS Form)		0				
Total National Register Eligible Sites		0				

15. Description of Findings: (see attached report) **No significant historic properties were identified within the areas of direct impact.**

16. Collection Yes No

(If Yes) Curation Facility:

Accession Number(s):

17. Conclusion/Recommendations: **Clearance is recommended.**



## UTAH STATE COVER PAGE

Must Accompany All Project Reports  
Submitted to Utah SHPO

Project Name: Class III cultural resources inventory for Gasco Production Company of seven proposed Wilkin Ridge well locations and 1.4 miles of linear routes (roads and/or pipelines) in Duchesne County, Utah

State Proj. No. **U06-GB-0120b**

Report Date: **03/07/2006**

County(ies): **Duchesne**

Principal Investigator: **Carl E. Conner**

Field Supervisor(s): **Carl E. Conner**

Records search completed at: **BLM and UDSH**

Record search date(s): **2/27/06**

Acreage Surveyed ~ Intensive: **104.25**

Recon/Intuitive: 0 acres

7.5' Series USGS Map Reference(s): **Wilkin Ridge 1965**

Sites Reported	Count	Smithsonian Site Numbers
<b>Archaeological Sites</b>	0	
Revisits (no inventory form update)		
Revisits (updated IMACS site inventory form attached)	0	
New recordings (IMACS site inventory form attached)	0	
Total Count of Archaeological Sites	0	
<b>Historic Structures</b> (USHS 106 site info form attached)	0	
<b>Total National Register Eligible Sites</b>	0	

### -----Checklist of Required Items-----

1. ☒ Copy of the Final Report
2. ☒ Copy of 7.5' Series USGS Map with Surveyed/Excavated Area Clearly Identified.
3. Completed IMACS Site Inventory Forms, Including  
    ☐ Parts A and B or C,      ☐ The IMACS Encoding Form,  
    ☐ Site Sketch Map,      ☐ Photographs  
    ☐ Copy of the appropriate 7.5' Series USGS Map w/ the Site Location Clearly Marked and Labeled with the Smithsonian Site Number
4. ☒ Completed "Cover Sheet" Accompanying Final Report and Survey Materials (Please make certain all of your checked items are attached.)

**Class III Cultural Resource Inventory Report  
of  
Seven Proposed Well Locations and Related Linear Routes (1.4 miles)  
in Duchesne County, Utah  
for  
Gasco Production Company**

Declaration of Negative Findings

GRI Project No. 2612  
7 March 2006

Prepared by

Grand River Institute  
P.O. Box 3543  
Grand Junction, Colorado 81502  
BLM Antiquities Permit No.05UT54939  
UDSH Project Authorization No. U06-GB-0120b



---

Carl E. Conner, Principal Investigator

Submitted to

The Bureau of Land Management  
Vernal District Office  
170 South 500 East  
Vernal, Utah 84078

## **Abstract**

Grand River Institute conducted a Class III cultural resources inventory for Gasco Production Company of seven proposed Wilkin Ridge well locations (Fed. #33-19-10-17, Fed. #43-20-10-17, Fed. #11-21-10-17, Fed. #41-21-10-17, Fed. #41-28-10-17, Fed. #23-28-10-17, and Fed. #41-31-10-17) and 1.4 miles of linear routes (roads and/or pipelines) in Duchesne County, Utah, under BLM Antiquities Permit No. 05UT-54939 and Utah Division of State History (UDSH) Project Authorization No. U06-GB-0120b. This work was done to meet requirements of Federal laws that protect cultural resources.

Files searches conducted through the BLM Vernal Field Office (BLM) and through Utah Division of State History indicated no sites were previously recorded in the project areas. Field work was performed on the 27<sup>th</sup> and 28<sup>th</sup> of February 2006. A total of about 104.25 acres (BLM ) was inspected. As a result no cultural resources were encountered. Accordingly, no significant historical properties were identified within the areas of direct impact and archaeological clearance is recommended for the proposed wells and linear routes.

## **Table of Contents**

<b>Introduction</b>	1
<b>Location of Project Area</b>	1
<b>Environment</b>	2
<b>Figure 1. Project location map</b>	3
<b>Files Search</b>	4
<b>Study Objectives</b>	4
<b>Field Methods</b>	4
<b>Study Findings and Management Recommendations</b>	5
<b>References</b>	5

## Introduction

At the request of Gasco Production Company and the Bureau of Land Management Vernal Field Office (BLM), Grand River Institute (GRI) conducted a Class III cultural resources inventory for Gasco Production Company of seven proposed Wilkin Ridge well locations (Fed. #31-19-10-17, Fed. #43-20-10-17, Fed. #11-21-10-17, Fed. #41-21-10-17, Fed. #41-28-10-17, Fed. #23-28-10-17, and Fed. #41-31-10-17) and 1.4 miles of linear routes (roads and/or pipelines) in Duchesne County, Utah, under BLM Antiquities Permit No. 05UT-54939 and Utah Division of State History (UDSH) Project Authorization No. U06-GB-0120b. File searches conducted through the BLM Vernal Field Office (BLM) on the 27<sup>th</sup> of February 2006 and through UDSH indicated no sites had been previously recorded in the project areas. Field work was performed on the 27<sup>th</sup> and 28<sup>th</sup> of February 2006. A total of about 104.25 acres (BLM) was inspected. The file searches, survey and report were completed by Carl E. Conner (Principal Investigator), Barbara J. Davenport, and Dana Archuleta.

The survey was done to meet requirements of the Federal Land Policy and Management Act of 1976, the National Historic Preservation Act as amended in 1992, and the National Environmental Policy Act (NEPA) of 1969. These laws are concerned with the identification, evaluation, and protection of fragile, non-renewable evidences of human activity, occupation and endeavor reflected in districts, sites, structures, artifacts, objects, ruins, works of art, architecture, and natural features that were of importance in human events. Such resources tend to be localized and highly sensitive to disturbance.

## Location of Project Area

The study area's discrete units lie southwest of Vernal, Utah, Duchesne County. The 10-acre blocks surveyed for the proposed new well locations, and the 200-foot-wide corridors for the proposed new access roads and/or pipeline routes are listed in Table 1 and shown in Figure 1. Notably, the linear distances of the inventoried access and pipeline routes are calculated outside the 10-acre block inventory areas.

---

**Table 1. List of well locations and linear routes.**

Well Designation	Land Status	Location
Fed. #33-19-10-17	BLM	T. 10 S., R. 17 E., Section 19 Access in Section 20
Fed. #43-20-10-17	BLM	T. 10 S., R. 17 E., Section 20

Well Designation	Land Status	Location
Fed. #11-21-10-17	BLM	T. 10 S., R. 17 E., Section 21 Linear route in Secs. 17 and 20
Fed. #41-21-10-17	BLM	T. 10 S., R. 17 E., Section 21
Fed. #41-28-10-17	BLM	T. 10 S., R. 17 E., Section 28
Fed. #23-28-10-17	BLM	T. 10 S., R. 17 E., Section 28 Linear route in Sec. 29
Fed. #41-31-10-17	BLM	T. 10 S., R. 17 E., Section 31

## Environment

The project areas are within the major geologic subdivision of the Colorado Plateau known as the Uinta Basin Section. In Utah, this section extends from the Uinta Mountains on the north to the Book Cliffs on the south. It is a broad downwarp into which Quaternary- and Tertiary-age deposits were made from the surrounding mountains which include Holocene and Pleistocene pediment deposits, and Eocene-age fluvial and lacustrine sedimentary rocks (Rigby 1976:xi). Physiographically, the basin includes the Uinta basin in the north portion and the Book Cliffs/Roan Plateau in the south portion. The lower Uinta Formation is the bedrock of the study area. Holocene and Pleistocene-age alluvium and colluvium occur as a veneer over the Uinta. It consists of channel and flood-plain stream deposits. Soils encountered were rocky, shaley, silty, and sandy loams, which are in general formed in residuum from the underlying formation. However, dunes are common in this region as well.

Elevations in the project area range from 5760-to-6380 feet. The terrain is characterized as bench land that is cut by dendritic washes. Vegetation is a shadscale desert community. Regional faunal inhabitants include deer, antelope, elk, black bear, coyote, mountain lion, cottontails, jack rabbits, and various raptors. A cool, mid-latitude steppe climate prevails. Annual precipitation of this elevation range is between 7 and 10 inches. Temperatures range from 100°F in the summer to -40°F in January.

Paleoenvironmental data are scant, but it is generally agreed that gross climatic conditions have remained fairly constant over the last 12,000 years. However, changes in effective moisture, and cooling-warming trends probably affected the prehistoric occupation of the region.

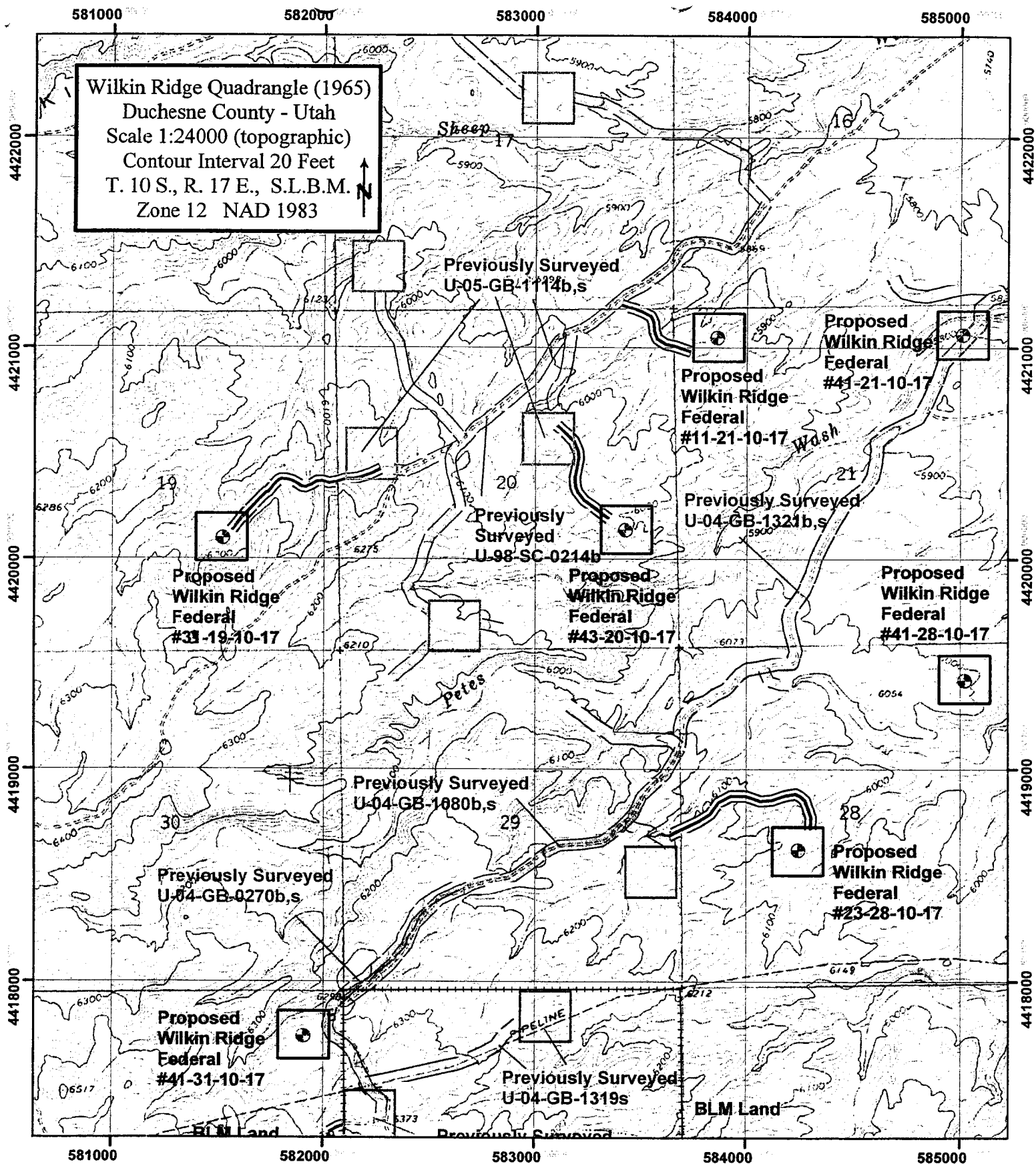
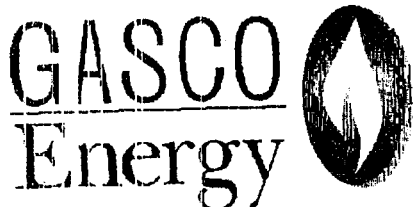


Figure 1. Project area map for the Class III cultural resources inventory of eight proposed Wilkin Ridge well locations and short linear routes (access and/or pipeline) in Duchesne County, Utah, for Gasco, Inc. Areas inventoried are highlighted. [GRI Project # 2612, 3/7/06, U06-GB-0120b]



Bureau of Land Management  
Vernal Field Office  
170 S. 500 E.  
Vernal, UT 84078

Attn: Minerals

Re: All Wells  
Uintah County, Utah

Gentlemen:

This letter is to inform you that Permitco Inc. is authorized to act as Agent and to sign documents on behalf of Gasco Production Company, a wholly owned subsidiary of Gasco Energy, Inc. when necessary for filing county, state and federal permits including Onshore Order No. 1, Right of Way applications, etc., for the above mentioned well.

It should be understood that Permitco is acting as Agent only in those matters stated above and is not responsible for drilling, completion, production or compliance with regulations.

Gasco Production Company agrees to accept full responsibility for operations conducted in order to drill, complete and produce the above-mentioned well.

Yours very truly,

  
Mark J. Choury  
Land Manager



**GASCO PRODUCTION COMPANY**  
**WILKIN RIDGE FEDERAL #41-28-10-17**  
LOCATED IN DUCHESNE COUNTY, UTAH  
SECTION 28, T10S, R17E, S.L.B.&M.



PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: EASTERLY



- Since 1964 -

**UELS** Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

**LOCATION PHOTOS**

**02** **22** **06**  
MONTH DAY YEAR

**PHOTO**

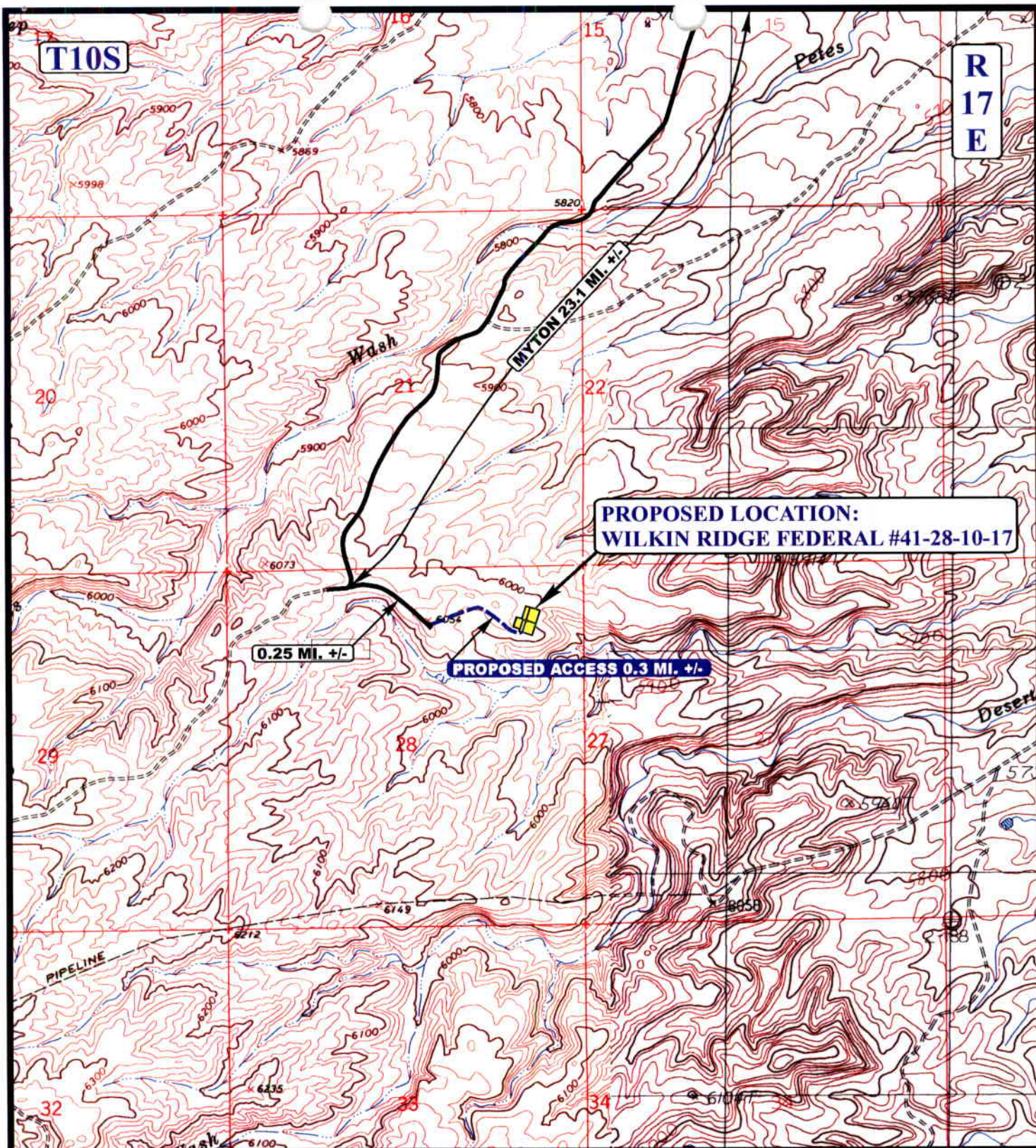
TAKEN BY: J.F.

DRAWN BY: C.P.

REV: 07-17-06 C.H.







# LEGEND:

EXISTING ROAD  
 PROPOSED ACCESS ROAD

## GASCO PRODUCTION COMPANY

WILKIN RIDGE FEDERAL #41-28-10-17  
 SECTION 28, T10S, R17E, S.L.B.&M.  
 793' FNL 858' FEL



Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



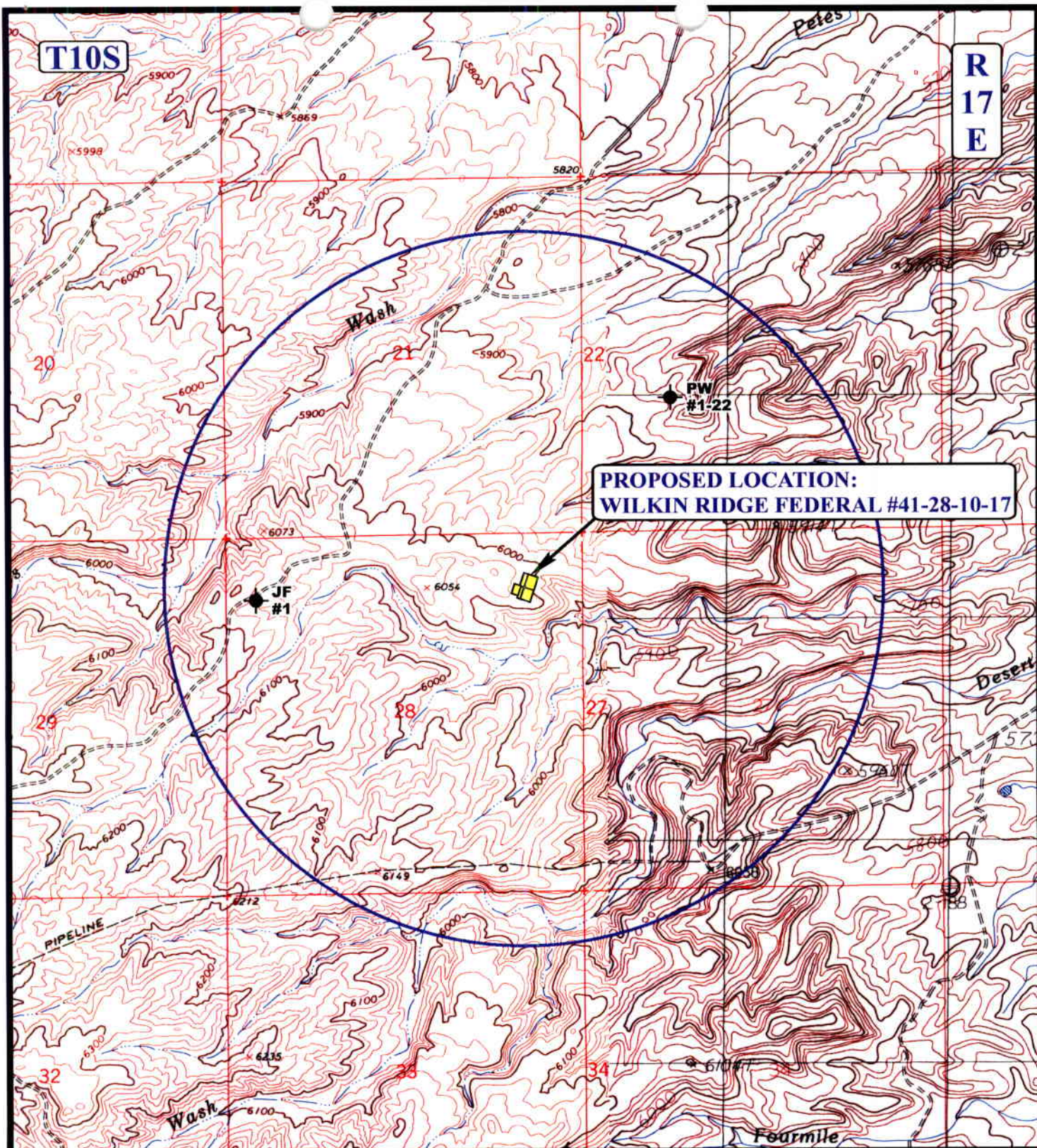
TOPOGRAPHIC  
 MAP

02 22 06  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.P. REV: 07-17-06 C.H.

B  
 TOPO





# LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

## GASCO PRODUCTION COMPANY

**WILKIN RIDGE FEDERAL #41-28-10-17**  
**SECTION 28, T10S, R17E, S.L.B.&M.**  
**793' FNL 858' FEL**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

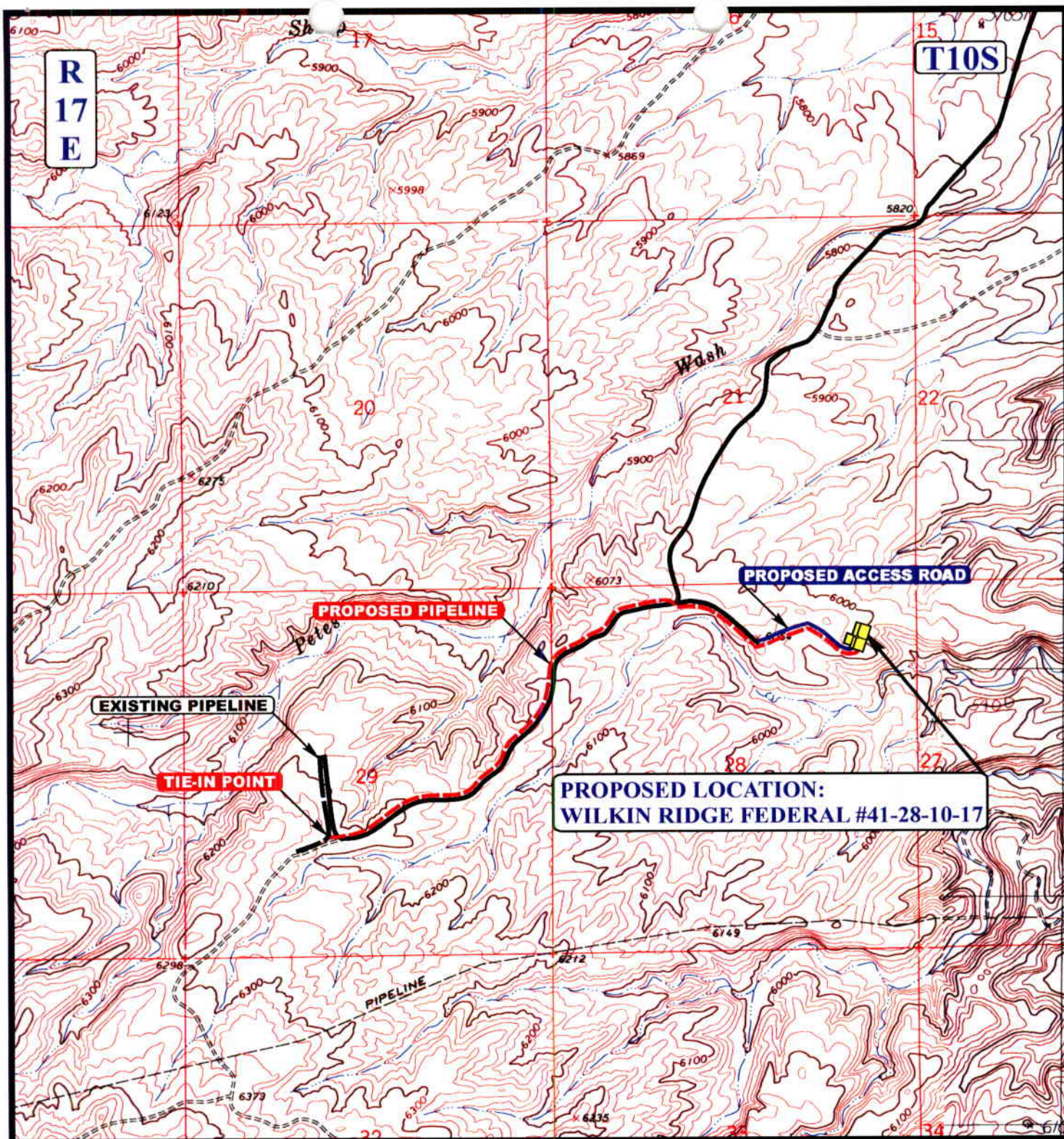
**TOPOGRAPHIC**  
**MAP**

**02 22 06**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.P. REV: 07-17-06 C.H.







**APPROXIMATE TOTAL PIPELINE DISTANCE = 9,570' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- - - - - EXISTING PIPELINE
- - - - - PROPOSED PIPELINE



**GASCO PRODUCTION COMPANY**

**WILKIN RIDGE FEDERAL #41-28-10-17  
SECTION 28, T10S, R17E, S.L.B.&M.  
793' FNL 858' FEL**



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC  
MAP**

**02 22 06**  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.P. REV: 07-17-06 C.H.





# WILKIN RIDGE FEDERAL #41-28-10-17

## SECTION 28, T10S, R17E, S.L.B.&M.

793' FNL 858' FEL

Approx.  
Toe of  
Fill Slope

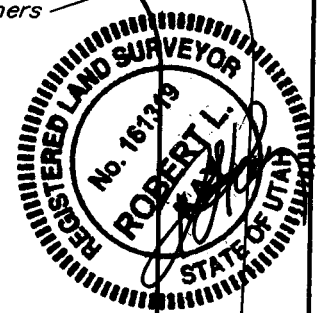
F-14.1'  
El. 5991.4'

Topsoil Stockpile

Sta. 3+80

GRADE  
El. 6005.5'

Round Corners  
as Needed



SCALE: 1" = 50'  
DATE: 07-18-06  
Drawn By: L.K.

Approx.  
Top of  
Cut Slope

DATA

200'

65'

190'

Pit Topsoil

FLARE PIT

C-4.6'  
El. 6010.1'

20' WIDE BENCH

El. 60148.9'  
C-19.4'  
(btm. pit)

Reserve Pit Backfill  
& Spoils Stockpile

10' WIDE BENCH

150'

Total Pit Capacity  
W/2' of Freeboard  
= 13,900 Bbls. ±  
Total Pit Volume  
= 3,930 Cu. Yds.

RESERVE PITS  
(10' Deep)

20' WIDE BENCH

El. 6017.9'  
C-22.4'  
(btm. pit)

C-8.9'  
El. 6014.4'

C-7.9'  
El. 6013.4'

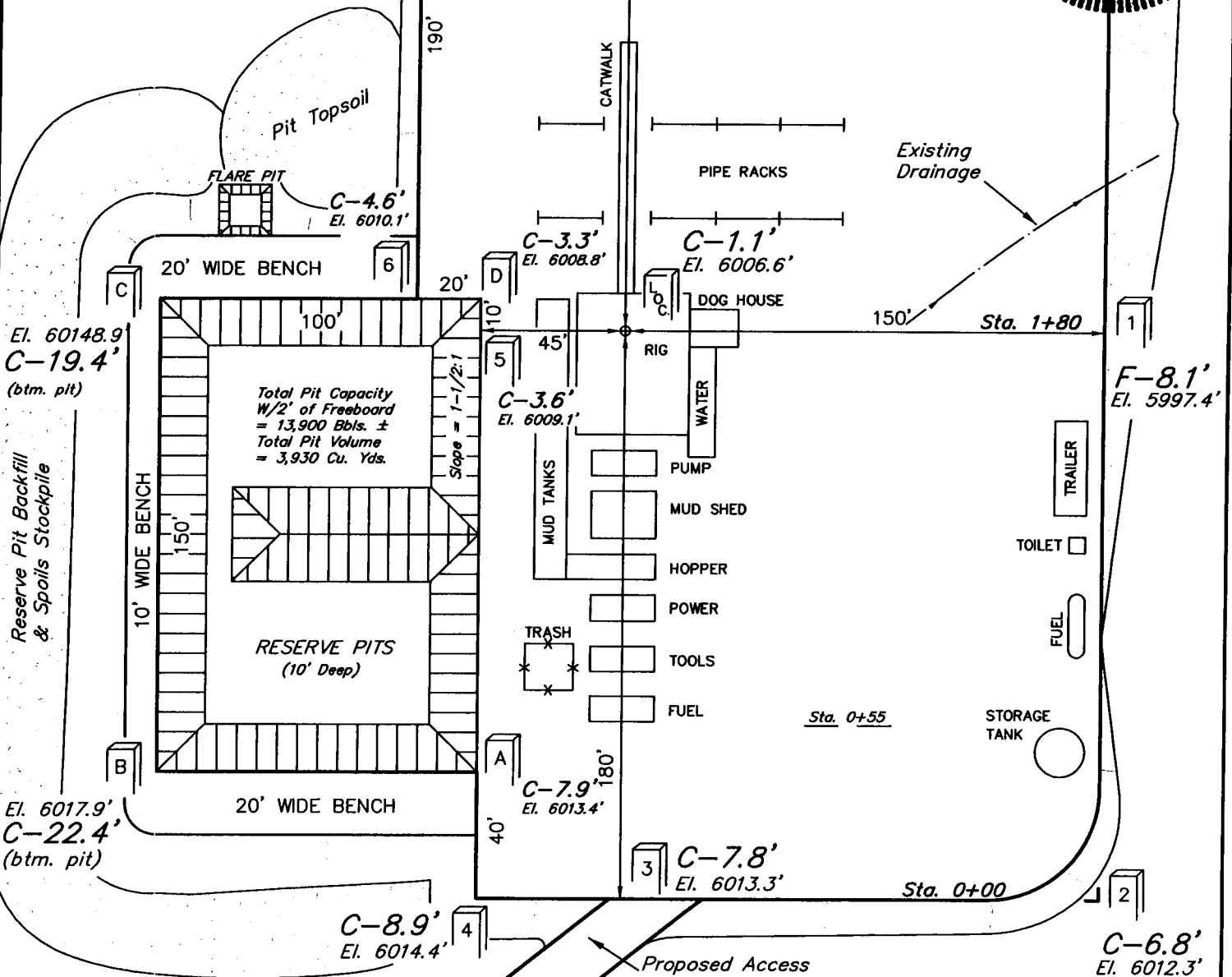
C-7.8'  
El. 6013.3'

C-6.8'  
El. 6012.3'

Elev. Ungraded Ground at Location Stake = 6006.6'  
Elev. Graded Ground at Location Stake = 6005.5'

Proposed Access  
Road

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (801) 789-1017

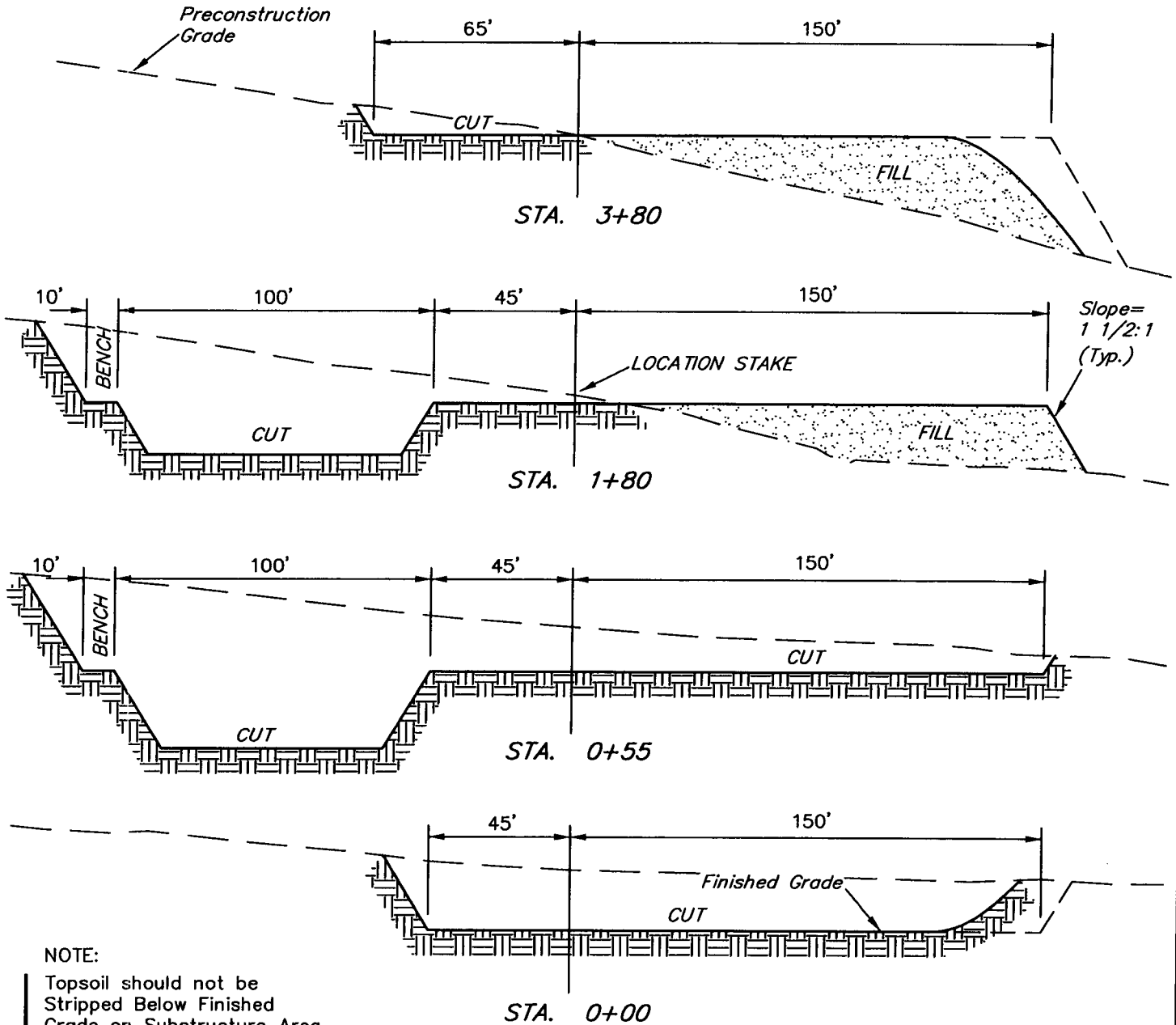


ASCO PRODUCTION COMPANY  
TYPICAL CROSS SECTIONS FOR  
WILKIN RIDGE FEDERAL #41-28-10-17  
SECTION 28, T10S, R17E, S.L.B.&M.  
793' FNL 858' FEL



1" = 20'  
X-Section Scale  
1" = 50'

DATE: 07-18-06  
Drawn By: L.K.



NOTE:

Topsoil should not be  
Stripped Below Finished  
Grade on Substructure Area.

APPROXIMATE YARDAGES

CUT  
(6") Topsoil Stripping = 2,210 Cu. Yds.  
Remaining Location = 15,580 Cu. Yds.  
TOTAL CUT = 17,790 CU.YDS.  
FILL = 8,980 CU.YDS.

\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

EXCESS MATERIAL = 8,810 Cu. Yds.  
Topsoil & Pit Backfill  
(1/2 Pit Vol.) = 4,180 Cu. Yds.  
EXCESS UNBALANCE = 4,630 Cu. Yds.  
(After Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (801) 789-1017

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 12/26/2006

API NO. ASSIGNED: 43-013-33473

WELL NAME: WILKIN RIDGE FED 41-28-10-17

OPERATOR: GASCO PRODUCTION ( N2575 )

PHONE NUMBER: 303-857-9999

CONTACT: TABATHA PARKER

PROPOSED LOCATION:

NENE 28 100S 170E

SURFACE: 0793 FNL 0858 FEL

BOTTOM: 0793 FNL 0858 FEL

COUNTY: DUCHESNE

LATITUDE: 39.92005 LONGITUDE: -110.0045

UTM SURF EASTINGS: 585079 NORTHINGS: 4419148

FIELD NAME: UNDESIGNATED ( 2 )

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
-------------	----------	------

Engineering		
-------------	--	--

Geology		
---------	--	--

Surface		
---------	--	--

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-75085

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: BLKHK

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

☒ Plat

☒ Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. UT-1233 )

☒ Potash (Y/N)

☒ Oil Shale 190-5 (B) or 190-3 or 190-13

☒ Water Permit

(No. 43-1721 )

☒ RDCC Review (Y/N)

(Date: \_\_\_\_\_ )

☒ Fee Surf Agreement (Y/N)

☒ Intent to Commingle (Y/N)

LOCATION AND SITING:

     R649-2-3.

Unit: WILKIN RIDGE DEEP

☒ R649-3-2. General

Siting: 460 From Qtr/Qtr & 920' Between Wells

     R649-3-3. Exception

     Drilling Unit

Board Cause No: \_\_\_\_\_

Eff Date: \_\_\_\_\_

Siting: \_\_\_\_\_

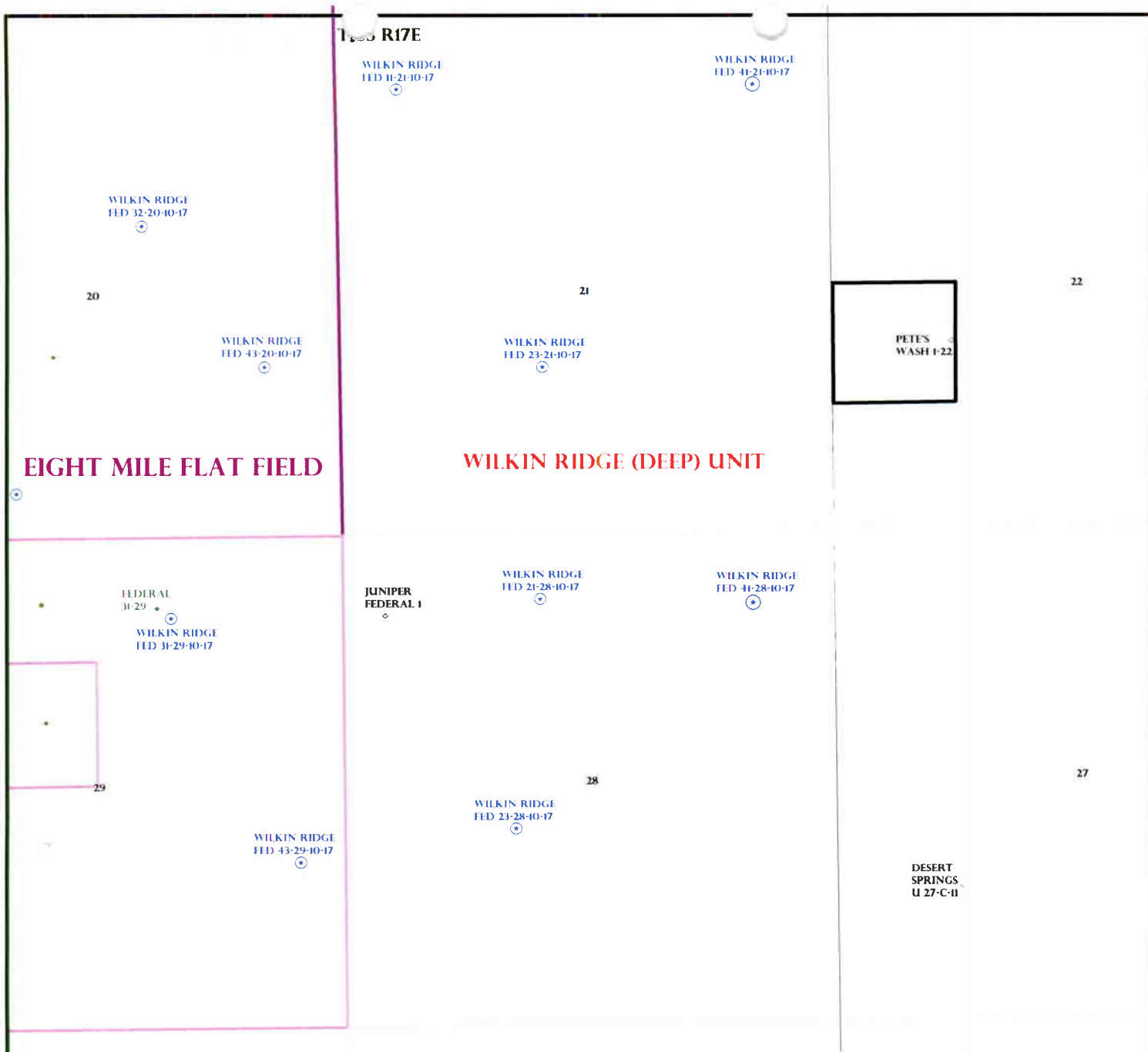
     R649-3-11. Directional Drill

COMMENTS: \_\_\_\_\_

STIPULATIONS: \_\_\_\_\_

1- Federal Approval  
2- Spacing Strip





OPERATOR: GASCO PROD CO (N2575)

SEC: 21,28 T.10S R. 17E

FIELD: UNDESIGNATED (002)

COUNTY: DUCHESNE

SPACING: R649-3-2 / GENERAL SITING

#### Field Status

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

#### Unit Status

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

#### Wells Status

- ✖ GAS INJECTION
- ✖ GAS STORAGE
- ✖ LOCATION ABANDONED
- ⊕ NEW LOCATION
- ✖ PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- ✖ SHUT-IN GAS
- SHUT-IN OIL
- ✖ TEMP. ABANDONED
- ⊕ TEST WELL
- ⊕ WATER INJECTION
- ⊕ WATER SUPPLY
- ⊕ WATER DISPOSAL
- ⊕ DRILLING



Utah Oil Gas and Mining



PREPARED BY: DIANA MASON  
DATE: 27-DECEMBER-2006

# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:  
3160  
(UT-922)

January 3, 2007

### Memorandum

To: Assistant District Manager Minerals, Vernal District  
From: Michael Coulthard, Petroleum Engineer  
Subject: 2007 Plan of Development Wilkin Ridge Unit, Duchesne and Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2007 within the Wilkin Ridge Unit, Duchesne County, Utah.

API #	WELL NAME	LOCATION
-------	-----------	----------

(Proposed PZ Blackhawk)

43-013-33468	Wilkin Ridge State 23-16-10-17 Sec 16 T10S R17E 1948 FSL 1995 FWL	
43-013-33473	Wilkin Ridge Fed 41-28-10-17 Sec 28 T10S R17E 0793 FNL 0858 FEL	
43-013-33474	Wilkin Ridge Fed 41-21-10-17 Sec 21 T10S R17E 0478 OFNL 813 FEL	

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File – Wilkin Ridge Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:1-3-07



## State of Utah

### Department of Natural Resources

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas & Mining

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

January 3, 2007

Gasco Production Company  
8 Inverness Drive East, Suite 100  
Englewood, CO 80112

Re: Wilkin Ridge Federal 41-28-10-17 Well, 793' FNL, 858' FEL, NE NE, Sec. 28,  
T. 10 South, R. 17 East, Duchesne County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-013-33473.

Sincerely,

A handwritten signature in black ink, appearing to read "Gil Hunt".

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Duchesne County Assessor  
Bureau of Land Management, Vernal District Office

**Operator:** Gasco Production Company  
**Well Name & Number** Wilkin Ridge Federal 41-28-10-17  
**API Number:** 43-013-33473  
**Lease:** UTU-75085

**Location:** NE NE                      **Sec.** 28                      **T.** 10 South                      **R.** 17 East

### **Conditions of Approval**

**1. General**

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

**2. Notification Requirements**

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

**3. Reporting Requirements**

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

**4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.**

**5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.**

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 75085
2. NAME OF OPERATOR: Gasco Production Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NA
3. ADDRESS OF OPERATOR: 8 Inverness Dr E, Ste 100 CITY Englewood STATE Co ZIP 80112		7. UNIT or CA AGREEMENT NAME: NA
PHONE NUMBER: (303) 483-0044		8. WELL NAME and NUMBER: Wilkin Ridge Federal 41-28-10-17
4. LOCATION OF WELL FOOTAGES AT SURFACE: 793' FNL 858' FEL		9. API NUMBER: 4301333473
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENE 28 10S 17E		10. FIELD AND POOL, OR WILDCAT: Wilkin Ridge
COUNTY: Duchesne		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Extend Permit</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Gasco Production Company would like to request a one year extension on this APD from the date it is due to expire (1/3/2008)

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 12-26-07  
By: [Signature]

RECEIVED  
DEC 26 2007  
DIV. OF OIL, GAS & MINING

NAME (PLEASE PRINT) Beverly Walker TITLE Engineering Technician  
SIGNATURE [Signature] DATE 12/20/2007

(This space for State use only)

RESET

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 4301333473  
**Well Name:** Wilkin Ridge Federal 41-28-10-17  
**Location:** NE NE of Section 28-T10S-R17E Duchesne Cnty, UT  
**Company Permit Issued to:** Gasco Production Company  
**Date Original Permit Issued:** 1/3/2007

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☒

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒

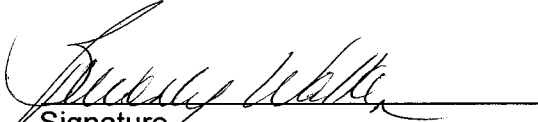
Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐

  
Signature

12/20/2007

Date

Title: Engineering Technician

Representing: Gasco Production Company



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

February 26, 2009

Gasco Production Company  
8 Inverness Drive E, Ste 100  
Englewood, CO 80112

Re: APD Rescinded – Wilkin Ridge Fed 41-28-10-17, Sec. 28, T. 10S, R. 17E  
Duchesne, Utah API No. 43-013-33473

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on January 3, 2007. On December 26, 2007, the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective February 26, 2009.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason  
Environmental Scientist

cc: Well File  
Bureau of Land Management, Vernal





# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Green River District  
Vernal Field Office  
170 South 500 East  
Vernal, UT 84078

<http://www.blm.gov/ut/st/en/fo/vernal.html>



April 1, 2013

IN REPLY REFER TO:  
3160 (UTG011)

Roger Knight  
Gasco Energy Inc.  
7979 Tufts Ave., Suite 1150  
Denver, CO 80237

43 013 33473

Re: Request to Return APD  
Well No. Wilkin Ridge Federal 41-28-10-17  
NENE, Sec. 28, T10S, R17E  
Duchesne County, Utah  
Lease No. UTU-75085  
Wilkin Ridge Unit

Dear Roger:

The Application for Permit to Drill (APD) for the above referenced well received in this office on August 14, 2006, is being returned unapproved per your request to this office in an email message to Natural Resource Specialist William T. Civish Jr. received on February 19, 2013. If you intend to drill at this location at a future date, a new APD must be submitted.

If you have any questions regarding APD processing, please contact Robin R. Hansen at (435) 781-3428.

Sincerely,

/s/ Jerry Kenczka

Jerry Kenczka  
Assistant Field Manager  
Lands & Resource Minerals

Enclosures

cc: UDOGM

bcc: Well File

RECEIVED  
MAY 01 2013  
DIV. OF OIL, GAS & MINING